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NATIONAL THERMAL POLLUTION RESEARCH PROGRAM

BASIC DATA REPORT ON THE
TURBULENT SPREAD OF HEAT & MATTER

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PREFACE

This is a Basic Data Report on a cooperative study between the U.S. Geological Survey and the Environmental Protection Agency aimed at measurement of turbulent transport properties of heated and salt water jets in a channel. The hydraulic flow facilities at Colorado State University were used.

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SYMBOLS

Symbol	Definition
A	Area of flow cross section
C	Concentration
C_j	Concentration of dispersant
C/\sqrt{g}	Chezy discharge coefficient
d_j	Inside diameter of jet
D	Normal depth of flow
D_x	Longitudinal dispersion coefficient
DT	Temperature difference between diffusing plume and ambient flow field
f	Resistance coefficient
IF	Flow Froude number
IF_j	Jet Froude number
g	Gravitational constant
k	Turbulence wave number
K	Jet strength
L_x	Macroscale of turbulence
N	Number of samples
Q	Discharge of flumeflow
R	Hydraulic radius
IR	Flow Reynolds number
$R(\tau)$	Autocorrelation function
$R_u(x)$	Longitudinal space correlation function
$R_u(z)$	Lateral space correlation function

SYMBOLS - (Continued)

Symbol	Definition
$R_u(y)$	Vertical space correlation function
$R_u(\xi, \tau)$	Longitudinal space-time correlation function
S	Water surface slope
t	Time
T	Temperature
T_E	Eulerian integral time scale
U	Instantaneous velocity
\bar{U}	Local mean velocity
$\sqrt{u'^2}$	Longitudinal turbulence intensity
U_*	Shear velocity
U_j	Velocity of issuing jet from the nozzles
\bar{V}	Mean velocity of flow
W	Flume width
x	Longitudinal coordinate direction
y	Vertical coordinate direction
z	Lateral coordinate direction
Z/HW	Dimensionless width, distance from center line divided by half-width of flume
ν	Kinematic viscosity
μ	Dynamic viscosity
γ	Specific weight of water
ρ	Density of fluid

SYMBOLS - (Continued)

Symbol	Definition
$\Delta\rho$	Density difference between the flow field and the tracer fluid
τ	Delay time
τ_0	Shear stress at the bed
λ	Microscale of turbulence
ξ	Separation distance
σ_{τ}^2	Variance of the longitudinal dispersion process with respect to time
σ_y^2	Variance of vertical distribution
σ_z^2	Variance of lateral distribution

ABSTRACT

The purpose of this report is to present the results of an investigation of the turbulent transport properties of heated and salt water jets in an open channel flow. The data were taken cooperatively by the U.S. Geological Survey and the Environmental Protection Agency. The data include measurement of the turbulence characteristics, longitudinal dispersion, and vertical and lateral turbulent diffusion. Three different boundary roughnesses were used in the investigation.

The turbulence data includes the intensity of turbulence, Eulerian time scales, autocorrelation function distributions, space correlation distributions in the vertical and horizontal directions and space-time correlation function distributions in the longitudinal direction.

Vertical and lateral turbulent diffusion data were obtained downstream from jets of three diameters, at four different jet strengths. Two tracer fluids, heated water and a neutrally buoyant salt solution were used.

Only basic data are reported here. The extensive analysis of these results will be the subject of a future publication.

INTRODUCTION

Because of its natural abundance and high specific heat, water has long been used to remove the unwanted waste heat produced by industrial processes. Upon returning to its natural course, the heated water mixes with the ambient water and eventually the waste heat is transferred to the atmosphere. The control of thermal pollution involves among other things the specification of the proper dilution of the heated water with the ambient. Dilution begins immediately at the point of discharge by entrainment of the ambient water and continues some distance from this point. This establishes a zone within which the temperature is in excess of the ambient water temperature. The dimensions of this mixing zone can be controlled.

Outfalls are designed with the prime objective of obtaining the desired dilution of the heated water within a prespecified mixing zone. Adequate knowledge of the physical spread and behavior of a heated plume is essential to the successful design of an outfall. A comprehensive review of the subject can be found in recent publications by Baumgartner and Trent⁽¹⁹⁷⁰⁾ and by Koh and Fan⁽¹⁹⁷⁰⁾. Despite much progress in this area, only gross behavior of the plume can be predicted. The difficulty lies mainly in the specification of the turbulent transport properties along the trajectory of the plume. A brief discussion of some important factors that influence the physical behavior of a plume illustrates the need for further work along this line.

The spread of a heated plume in the ambient receiving water is affected by one or more of the following factors:

1. Source characteristics: These include flow rate, source temperature, source velocity and outlet geometry.
2. Discharge characteristics: Among these are submergence (i.e., subsurface or surface discharge), single or multiple jet discharge, and discharge angles both with respect to the direction of the ambient current as well as the direction of the force of gravity.
3. Ambient water conditions: Important items are the velocity distribution, turbulence level, temperature and density stratifications, and channel geometry.
4. Ambient atmospheric conditions: Possible influencing factors are the wind speed, air temperature and relative humidity and solar radiation.

There exists some interaction among all these factors even in the absence of complications due to channel boundaries. For example, the surface exchange of momentum (due to the action of wind) induces circulation and turbulence. The surface exchange of heat and mass affect stratification and, in turn, the ambient turbulence. Shear currents set up convective transport of heat and momentum both of which modify the turbulence structure and density stratification. Finally, the injection of a secondary fluid of a temperature higher than ambient creates local turbulent mixing and raises the water temperature.

Individual effects play roles of varying importance in a plume region depending on the proximity of the region to the source. Close to the source, the jet momentum and buoyancy are often the dominating factors. Of some importance in this region are the currents and stratification if these are present. Far away from the source, the ambient current and turbulence strongly influence the spread of the plume. If in this region the plume has reached the water surface, surface exchange activities also become important. In the intermediate region all factors may play equally important roles. The analysis of this region is by far the most difficult of all and needs careful consideration, particularly with respect to determining the degree of influence of each factor.

The discharge of a heated jet in an ambient water sets up a continuous exchange of heat and momentum throughout the jet's trajectory. The trajectory and the spread of the plume itself are modified by this process of exchange with the ambient. The laws governing the exchange of heat, mass, and momentum adequately describe the behavior of the plume. In principle, at least, these transport equations can be solved either in closed form through appropriate simplifying assumptions or numerically by using high-speed computers. The solution of these equations would result in prediction of the plume trajectory, plume width, and some information on the temperature distribution.

It should be pointed out that at this time there is no single model, be it mathematical or physical, that successfully analyzes all factors simultaneously. Even if it were possible to have such a model its development would be too difficult and uneconomical for us to consider now. More realistically, the treatment of the entire plume must be taken up in small "bites," the size of each bite being governed by the number of physical factors that can be conveniently handled in one model.

In the analysis of turbulent fluid motion, the transport equations are assumed to be satisfied by the instantaneous values of the flow parameters. Each instantaneous value is assumed separable into a mean and a random fluctuating component. The equations of transport are time-averaged so the turbulent flow parameters such as velocity, temperature, density, etc., do not appear as random quantities but as averages of products (i.e., correlations). The most widely used correlations describing the statistical behavior of a turbulent field are the correlation of the orthogonal velocities (Reynolds stresses) and the correlation of a turbulent velocity component with temperature. The latter correlation is a measure of the turbulent transport of heat. The turbulent transport of matter has expressions similar to that for heat, with the temperature replaced by concentration.

The coefficient describing the turbulent transport of momentum is often called eddy viscosity and that describing the transport of heat is called eddy diffusivity. These coefficients enter the transport equations as unknowns. But, the appearances of the eddy viscosity and eddy diffusivity in these equations render the problem indeterminate. In other words, after averaging, there appear more unknowns than equations from which to obtain them. To find a complete solution of the problem these coefficients must be obtained independently of the averaged equations of transport. The most direct approach is to measure these quantities, preferably in scaled laboratory models from which some estimates of the same quantities in the prototype can be obtained. This is the approach taken in this investigation.

Other approaches to the problem have been used, namely the statistical approach and the semi-empirical approach. Although the statistical method will probably prove to be most effective in the study of turbulence, the present status of the statistical theory of turbulence is still far from being complete and satisfactory.

In the semi-empirical theories, the additional relations required for a full description of the turbulent flow are generally provided by two kinds of hypothesis, viz., the similarity of velocity or temperature profiles and some physical assumptions such as the mixing length theory. The latter theory provides information on the turbulent transport of momentum. Based on these hypotheses, solutions to many simple free turbulence problems have been worked out. Even then, the magnitudes of some constants have to be found from experiments. An additional hypothesis is needed to come up with eddy diffusivity. Much investigation is devoted to relating eddy viscosity to eddy diffusivity so that only one of the quantities requires actual measurement. In the oldest theory concerning the transport of heat in turbulent flows, namely, that of Reynolds, it is simply assumed that there is complete analogy between transport of momentum and transport of heat. Quite frequently, the Reynolds analogy or some modification of this theory is used in practical situations with varying degrees of success.

When considering outfall design, better prediction can no longer be expected solely as a result of reducing the computational sources of error. Instead, we must increase our knowledge of the basic physical process. For laminar flows our knowledge of the hydrodynamics involved is satisfactory. It is for turbulent flows that the status of fluid dynamics knowledge is inadequate.

The experiments in this study are designed to provide not only the direct measurement of the turbulent coefficients needed in the transport equations but also to enable isolating and analyzing the effects of various flow parameters on these coefficients. More specifically, the objectives of this study are:

1. Measure the eddy diffusivity at several stations along the trajectory of a heated jet and a salt water jet in vertical and horizontal directions and examine the similarity between the temperature and salinity profiles and velocity profile in the plume.

2. Measure turbulent dispersion (as a result of shear flow) in the longitudinal direction downstream of the jet.

3. Examine the influence of parameters such as jet flow rate, jet temperature, jet velocity, ambient turbulence levels, and ambient shear velocity on the spread of the heated plume and the salt jet.

4. Establish modeling procedures for correcting the effects of "distorted" turbulent time and space scales in the laboratory experiments for application to field situations.

5. Relate the eddy diffusivity with the Eulerian turbulent scales of the field.

Items 1 and 2 provide some direct measurements of eddy diffusivity in a plume from a circular source. Item 1 also examines the analogy between momentum and heat transfer.

Items 3 and 4 are the ultimate objectives of this series of experiments and provide turbulent diffusivity data that can be applied to field situations. The essential point of departure between the turbulence generated in the laboratory and that existing in the field situations such as a river or a lake is the difference between time and space scales of the turbulence. The laboratory models in effect distort the field scales by shrinking them to smaller and more manageable dimensions; however, inadequate boundary conditions due to the limited extent of the model and inadequate initial conductions due to the unsteady flow characteristics may give limited information. A successful modeling that enables the interpretation of the field situation in terms of laboratory data must consider such effects of scale distortion. An important objective of the present investigation is to examine the effects of turbulent scale distortion on diffusivity.

Other physical variables such as jet Froude numbers and jet strength (i.e., the ratio of jet to ambient fluid velocities), etc., are also considered in the modeling analysis. To this end, at least three laboratory models are made in which all elements but one (say the turbulence level) remain constant. Then the measured variations between diffusivities from the three models reflect only the effect of the variation in the one parameter (i.e., the ambient turbulence level). The extrapolation of the data based on the three distorted laboratory scales to a field scale should give a better estimate of diffusivity in the field.

The last objective is tentative. It aims at predicting the diffusivity in the field more or less directly and eliminates the need for distorted laboratory models. If successful, it would enable more general prediction based solely upon the knowledge of the Eulerian data and source characteristics. This is a very difficult problem, but some headway may be made in that direction from the measurements in this study. Care was taken to specify the ambient turbulent field adequately prior to injection of heated water. To this end turbulent velocity measurements were obtained at several cross sections along the channel. From these measurements turbulent space and space-time correlations were obtained.

Questions relative to the effect of ambient stratification and surface exchange on the spread of the plume are subjects of future analyses. A brief description of the present study follows.

Turbulent velocity measurements were made using a hot-film anemometer. From these, space-time correlations and turbulence scales were obtained. The temperature distributions downstream of a heated water jet and salt water jet were measured using single-electrode conductivity probes. The second central moment of the plume spread was then interpreted in terms of eddy diffusivity. The temperature and concentration distributions were measured in two orthogonal planes giving rise to diffusivities in the vertical and horizontal directions. The diffusivity measurements were carried out with several source conditions over each boundary roughness varying the jet water temperature and velocity. The ambient turbulence was varied by repeating all measurements with a smooth channel bottom as well as two rock roughnesses.

Longitudinal dispersion was obtained from the measurements of Rhodamine WT dye concentration distributions downstream of an instantaneous "plane source."

Detailed procedures that were followed in obtaining the above measurements as well as the flow equipment, instrumentation, data reduction, data processing and results are presented next.

EXPERIMENTAL APPARATUS

Flume

All the experiments were conducted in a flume 3.86 feet wide, 2 feet deep, and 120 feet long. The interior of the plywood flume was surfaced with a fiberglass finish, except for a section of the left sidewall 24 feet long which was made of transparent plexiglass. The slope of the plywood channel could be adjusted from 0 to 1.5 percent by 12 sets of screw jacks which supported the flume. To avoid heat and salt solution buildup within the flume, flow was not recirculated. A sketch of the flume is shown in Figure 1.

Fig. 1 -- Follows near here

Water-supply system

Water was withdrawn from Horsetooth Reservoir which provided an ample supply of water at a constant temperature and 200 feet of head. Flow was throttled to desired discharges by a 36-inch ball valve and two 12-inch globe valves. Discharge was measured by means of a calibrated orifice in the supply line. The water was passed through the flume and discharged into a small stream leading to an irrigation reservoir.

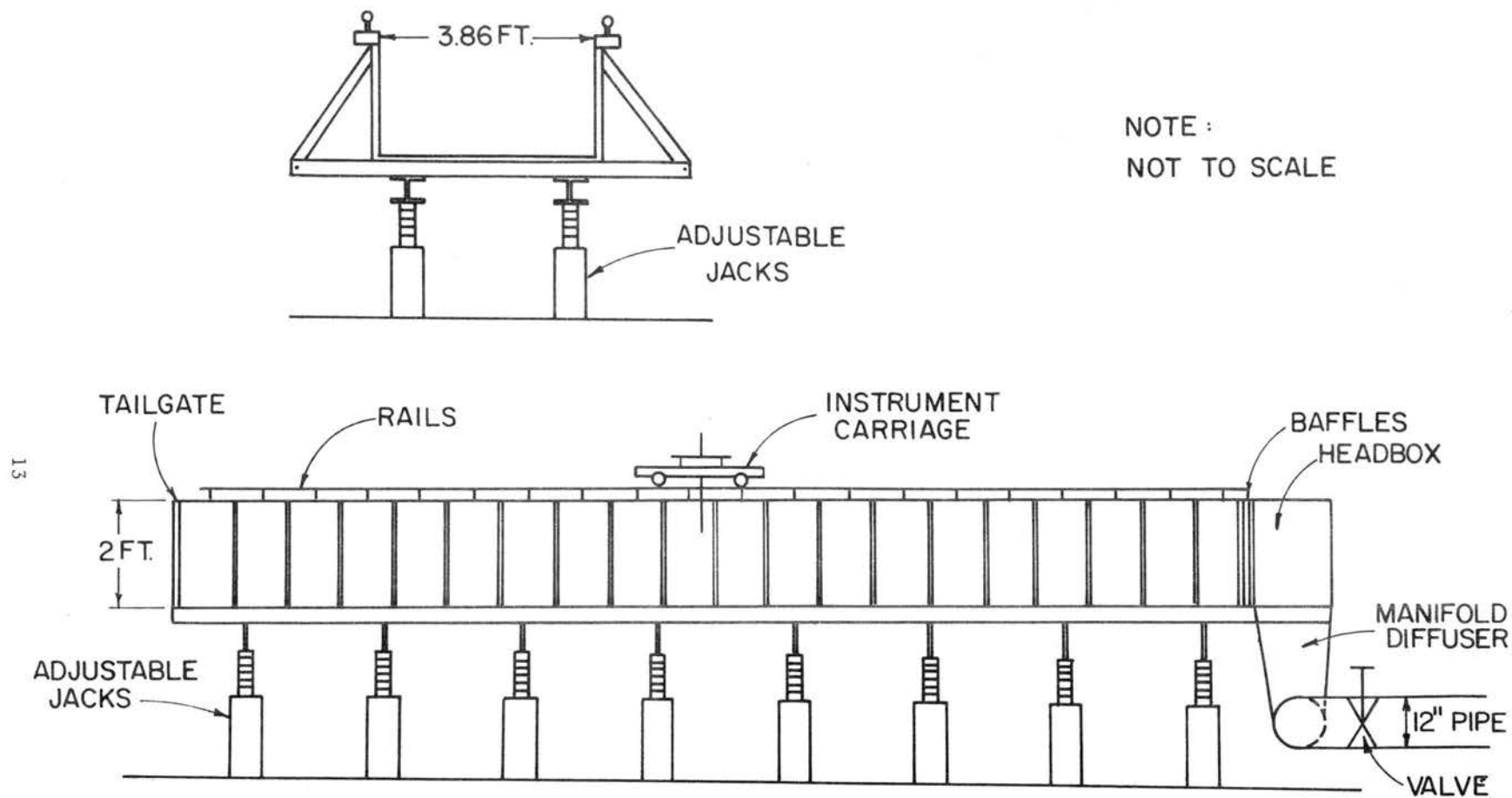


Figure 1.--Sketch of flume.

Instrument carriage

The flume was equipped with an instrument carriage which rested on rails mounted on the flume. The carriage was capable of traveling the entire length of the flume. The carriage was equipped with a traversing mechanism for moving sensing elements throughout the depth and breadth of the flow field. The flume and carriage are illustrated in Figure 2.

Fig. 2 -- Follows near here

Roughness

Three boundary roughnesses were used in this study. The first was a hydraulically smooth surface provided by the fiberglass finish on the plywood. The second was a hydraulically rough surface obtained by covering the flume bed with a layer of 3/4-inch diameter crushed rock as shown in Figure 3. The third was a rough surface obtained by

Fig. 3 -- Follows near here

scattering at random 3 to 6-inch diameter cobbles on top of 1 1/2-inch crushed rock as shown in Figure 4. Because of a resemblance to local

Fig. 4 -- Follows near here

streams the third roughness is referred to as the "riverbed."

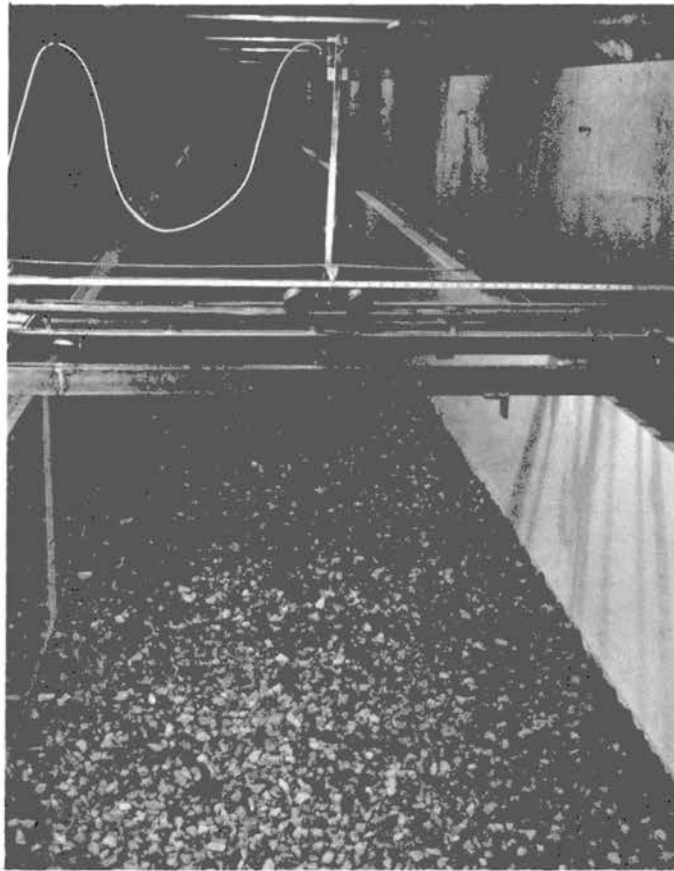


Figure 2.--Photograph of flume and carriage.

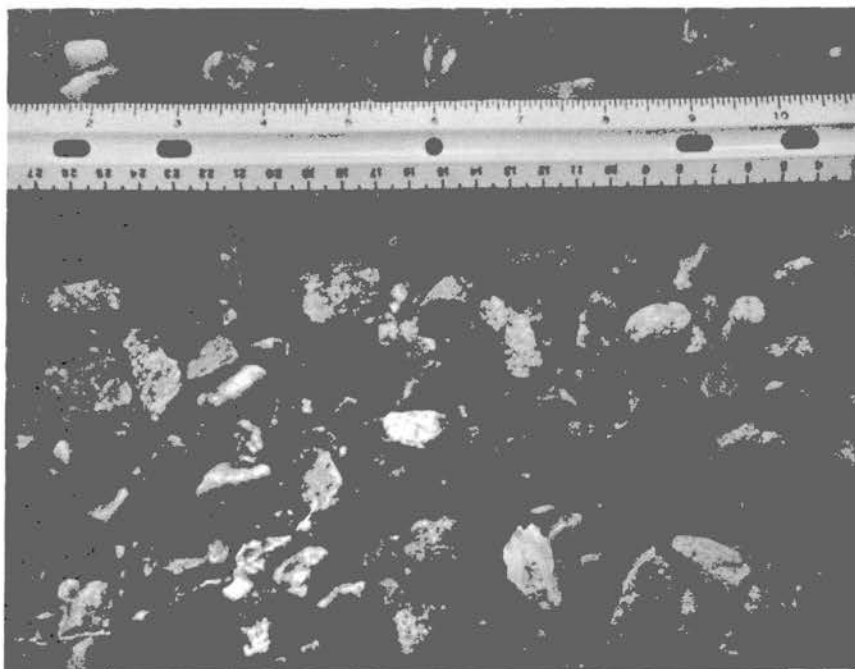


Figure 3.--Photographs of 3/4-inch rock roughness.

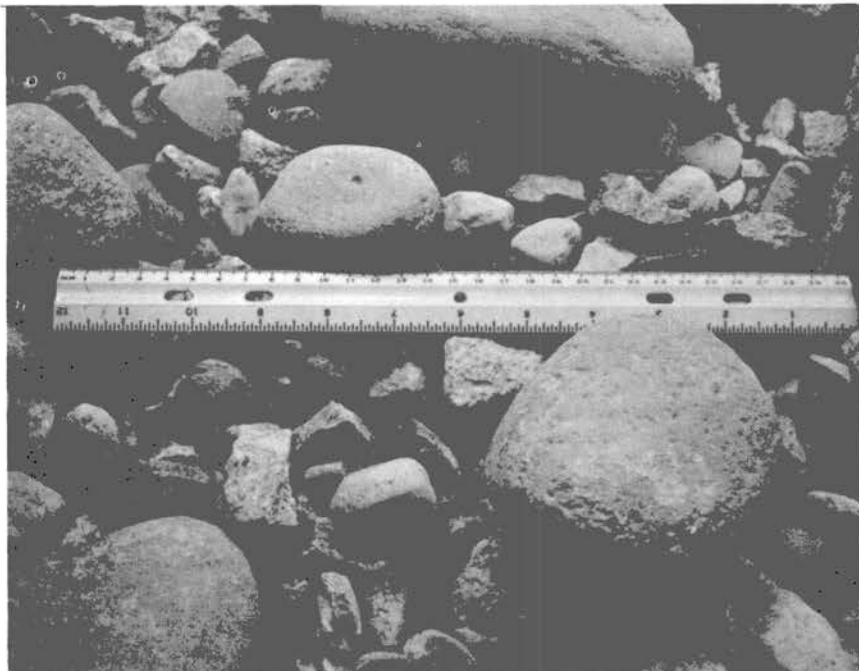


Figure 4.--Photographs of riverbed roughness.

Tracer Injection

Hot water and salt solution were injected into the flow field through curved nozzles extending through the water surface. Three sizes of nozzles were used. Their inside diameters were 0.468 cm., 1.094 cm., and 1.882 cm. All three nozzles were constructed of flexible copper tubing. The large nozzle and the support system are illustrated in Figure 5. The Rhodamide WT Dye was introduced into the channel as

Fig. 5 -- Follows near here

an instantaneous plane source by means of a narrow trough.

Flow of hot water and salt solution were regulated by means of commercially available pressure regulators in the supply lines. An air-water manometer attached to the outlet side of the regulator was used to determine the discharge of the nozzle. The manometer was calibrated by first submerging the nozzle in a container to the depth of flow to be run in the flume. The weight of water spilled from the container per unit time was then determined at a wide range of manometer readings.

Hot-water system

Hot water was supplied by a commercially available gas-fired water heater. This heater was capable of supplying continuous output of 168 gallons per hour at 100° F. The system is shown in Figure 6.

Fig. 6 -- Follows near here

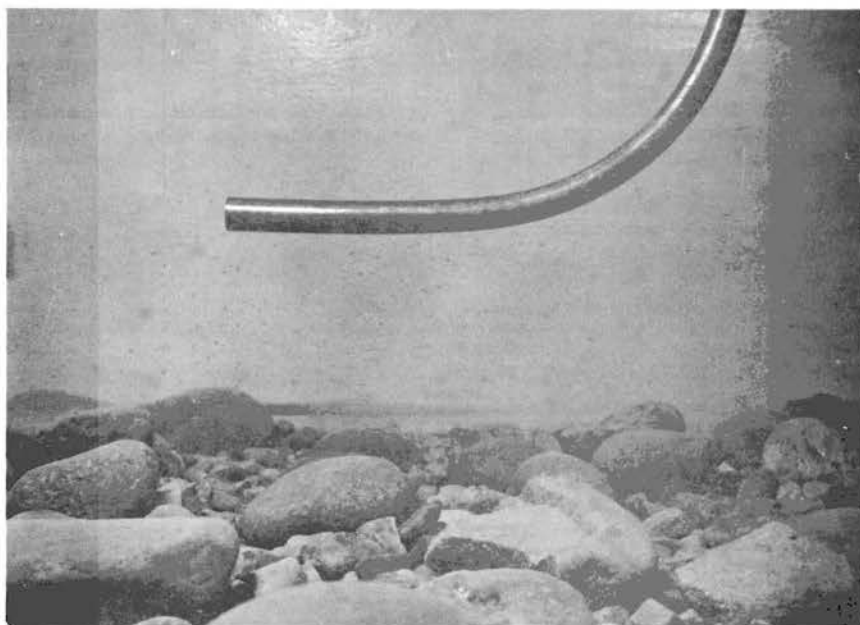


Figure 5.--Photographs of large nozzle showing injection at channel centerline in the direction of the flow.



Figure 6.--Photograph of hot-water system.

The injection temperature of the hot water was controlled by a commercially available thermostatic mixing valve. The valve operates by mixing hot and cold water to maintain some preset temperature. Originally designed for use in photochemical work, the mixing valve is capable of maintaining $\pm 0.1^{\circ}\text{F}$ output temperature. The system is shown in Figure 7.

Fig. 7 -- Follows near here

Salt system

Salt solution was prepared and stored in a specially constructed 500 gallon pressure tank, as shown in Figure 8. A one-half horsepower

Fig. 8 -- Follows near here

stirring motor inside the tank kept the solution constantly mixed. Water at the mean flow temperature was forced through a cooling radiator to maintain the solution in the tank at the same temperature as the flow. Pressure to force the solution from the tank was supplied by a large air compressor. Because of safety considerations no more than 15 pounds per square inch could be maintained. This proved to be adequate to supply the large nozzle at maximum discharge. The capacity of the tank allowed approximately three hours of steady running at maximum flow rate.



Figure 7.--Photograph of mixing valve panel.

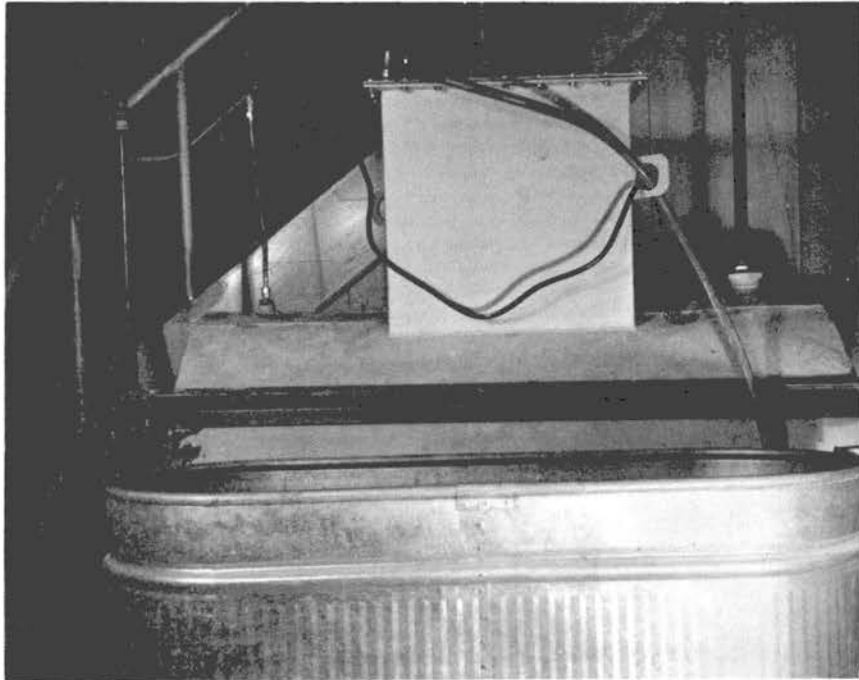


Figure 8.--Photograph of salt system.

The salt solution was composed of water, methyl alcohol, and salt. The alcohol content was varied to maintain the mixture at neutral buoyancy. A typical mixture consisted of 10.4 pounds of salt, 6.16 gallons of alcohol and 493 gallons of water.

Rhodamine WT dye

In order to simulate a uniformly distributed plane source of dispersant, a tilting trough was mounted 5 feet above the bed of the flume. The capacity of the trough was approximately one gallon. When rotated quickly the trough produced a nearly vertical sheet of dispersant which impacted on the water surface with sufficient momentum to penetrate through the depth of flow.

The dispersant used in this study was Rhodamine WT dye. One-half cubic centimeter in a 5 gallon container proved to be of sufficient strength.

Instrumentation

Fluorometer

The Rhodamine WT dye was detected by a commercially available fluorometer. Water was syphoned from the flume and through a flow-through door of the instrument. This allowed measurement of concentration versus time profiles. The output of the fluorometer was recorded on a strip-chart recorder.

Conductivity probe

All temperature and concentration measurements were made with a single-electrode conductivity probe. The probe used was patterned after those of Keeler (1964). Such probes operate on the theory that when an extremely large and an extremely small electrode are immersed in an electrolyte solution, the resistance between the two will be governed by the volume elements adjacent to the small electrode. This theory is documented by Gibson and Schwarz (1963). A cross section of the probe used in this study is illustrated in Figure 9. The resistance

Fig. 9 -- Follows near here

measuring unit used in this study was a commercially available carrier amplifier originally designed to operate strain gages. This unit was used without modification. Power for the carrier amplifier was provided by a compatible commercially available oscilloscope. The output was displayed on the oscilloscope. A "signal-out" jack provided 3 volts of DC output for each centimeter of deflection on the scope display screen. This voltage was used to drive a strip-chart recorder through an averaging circuit while collecting data.

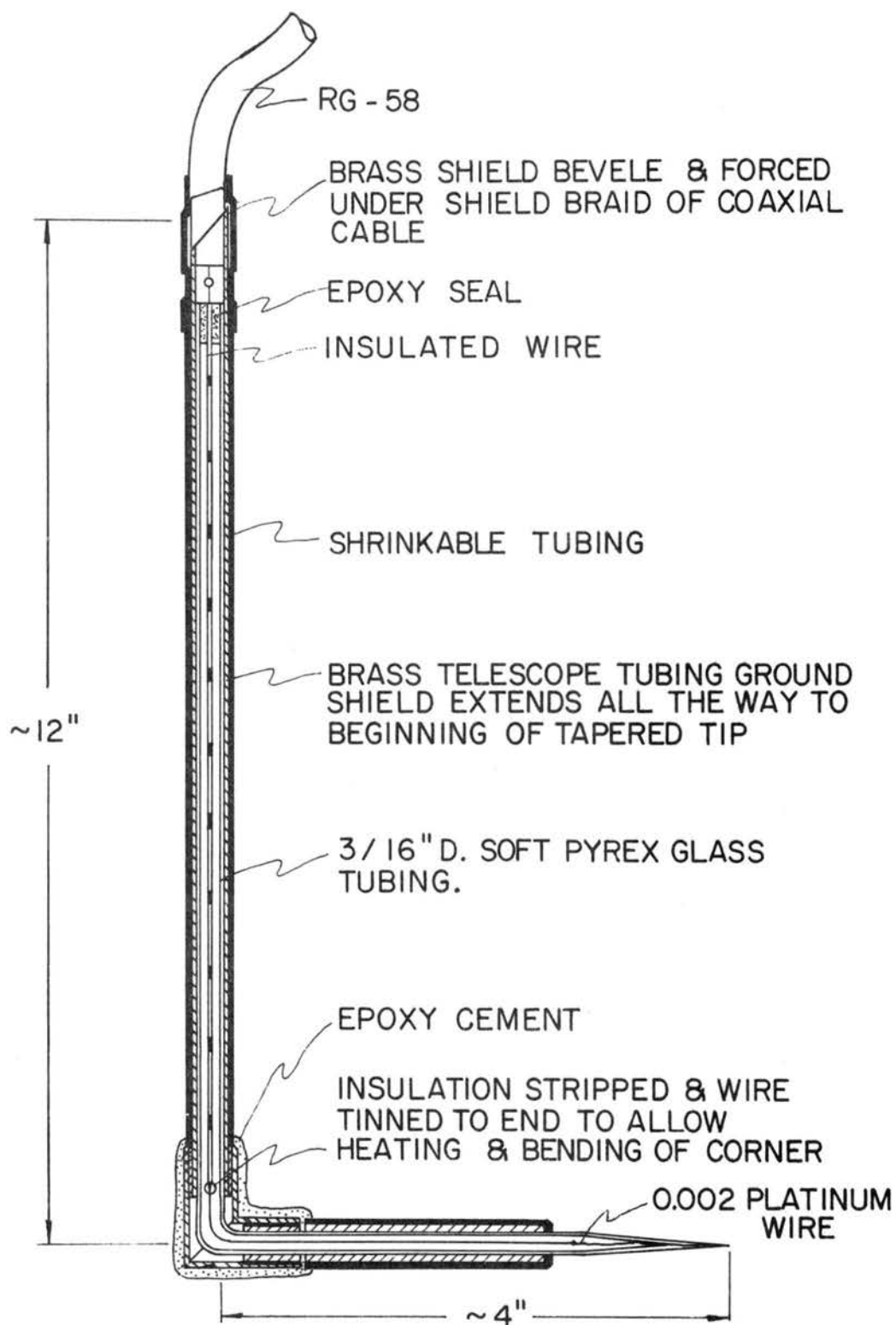


Figure 9.--Schematic of single-electrode conductivity probe.

Probe calibration for response to concentration was accomplished as follows: First a series of standard salt solutions were prepared ranging in concentration from 0 to 10,000 mg/liter. These solutions were stored in a constant temperature bath. The bath was cooled by water at stream flow temperature. A calibration curve of output voltage versus concentration was constructed by immersing the probe in each of the standards and recording the voltage output. The carrier amplifier unit was adjusted to give zero output in flume water.

Probe calibration for response to temperature was accomplished as follows: Water at the ice point was placed in an insulated container. The temperature was measured using a calibrated thermometer. The probe was then immersed and the output voltage adjusted to zero. Incremental amounts of hot water were added to the container and mixed thoroughly. After each addition the temperature and output voltage were recorded.

Probe response proved to be linear within ± 1 percent to both concentration (conductivity) and temperature. This made it unnecessary to run elaborate calibrations during measurements. Simply by checking the response at one concentration or temperature, it was possible to detect probe deterioration.

Turbulence system

Constant-temperature anemometer. The anemometer used in this study is a commercially available constant temperature compensating unit. When considering the use of an anemometer, two basic considerations should be investigated; the signal to noise ratio and the frequency response. The manufacturer reports that their unit has reasonably undistorted frequency response from 0 to 20 khz. The signal to noise ratio for the voltage output (several hundred millivolts) and frequency range of interest (0 to 100 hz) in water flow is certainly no problem. Therefore, there are no problems associated with the anemometer itself. In successfully using an anemometer for making specific fluid mechanics measurements, the selection of a sensor is then of primary importance.

For a detailed explanation and description of hot-film anemometry, the selection and the limitations of hot-film sensors, and the operational procedures, refer to McQuivey (written communication, 1971a).

Hot-film sensors. Parabolic shaped hot-film sensors were used because of their resistance to signal drift caused by fluid-born contaminants. These sensors are illustrated in Figure 10.

Fig. 10 -- Follows near here

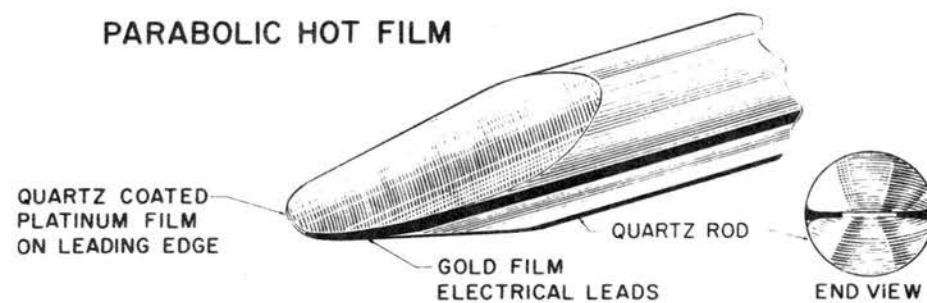


Figure 10.--Sketch of parabolic hot-film sensor.

The hot-film sensors were first calibrated in the 20-cm wide flume for mean flow velocities from about 0.3 to 7.0 feet per second and at several overheat ratios (from 1.10 to 1.06). This defined an adequate voltage/velocity relation for each sensor considering the temperature range in the flume and field, and the voltage drift due to foreign contaminants that might collect on the sensor. These calibration curves are then used later in the data reduction process [See McQuivey (1971a)].

In addition to the anemometer system a 1/8 inch diameter pitot tube and pressure transducer and indicator were used to measure local mean velocities.

Recording equipment

Auxiliary equipment used in conjunction with the anemometer included: A strip-chart recorder for recording mean output voltage; a true rms meter for determining the magnitude of voltage fluctuations; a 14-channel F.M. magnetic tape recorder for recording voltage fluctuations. A schematic of the electrical hookup is shown in Figure 11.

Fig. 11 -- Follows near here

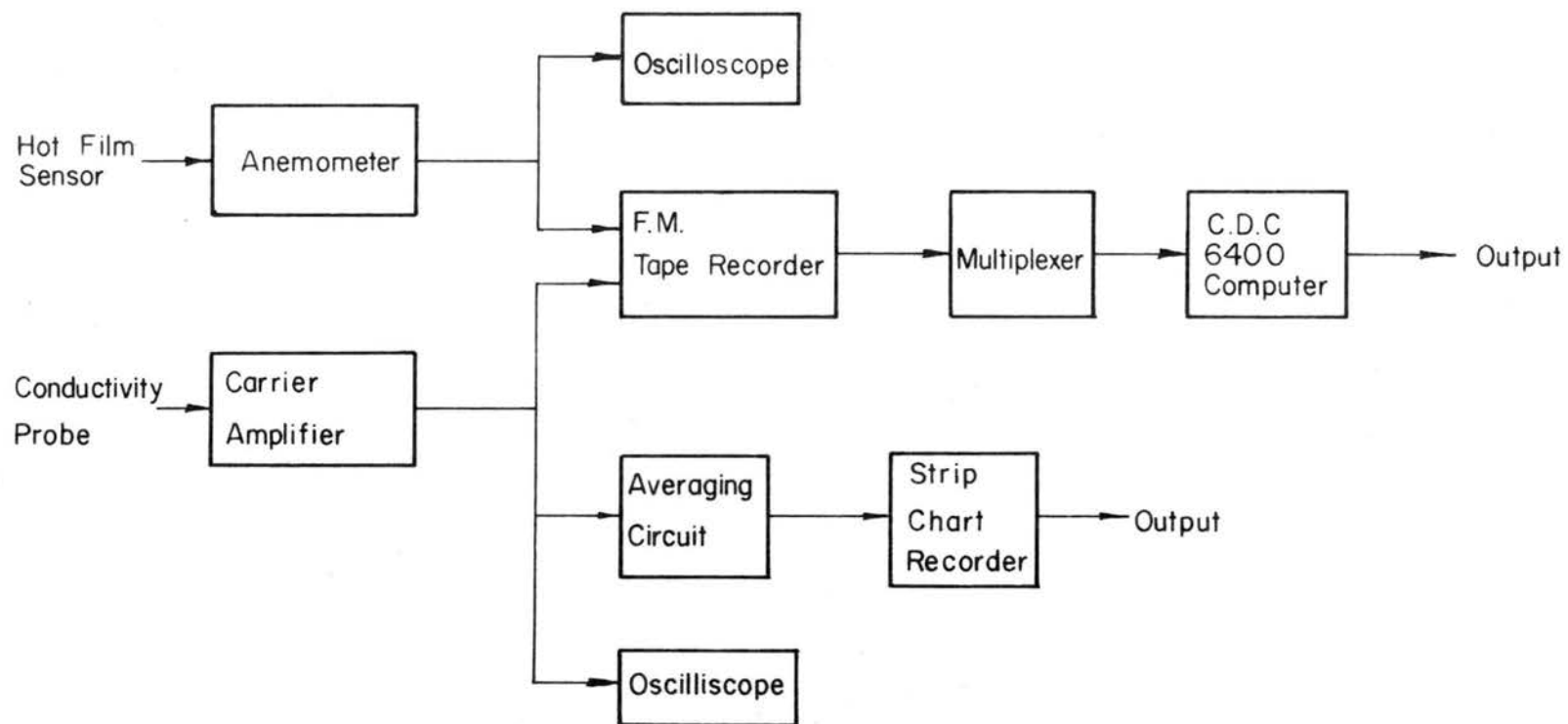


Figure 11.--Schematic of electronic equipment used in obtaining turbulence, temperature, and concentration data.

A to D conversion

The F.M. magnetic tapes were later digitized by employing a multiplexer and an A to D converter which was made available by the National Bureau of Standards at Boulder, Colorado. The digital voltage output was stored on digital magnetic tape in a format compatible with the CDC-6400 computer system at Colorado State University. The mean and root-mean-square of the fluctuations, the autocorrelation function, space-time correlations, and power spectra were obtained as computer printout.

Previous work had indicated that virtually all the power in the turbulence power spectrum is contained in frequencies less than 100 cycles per second. This would dictate a digitizing sampling interval of 0.005 seconds. By playing the F.M. magnetic tapes into the digitizer at double the recording speed and digitizing at 1000 samples per second, a real-time sample interval of 0.002 seconds was obtained. The programmed analysis was then set up to take only every fifth digitized point, or a sampling interval of 0.01 seconds. This gave a cut-off frequency, f_c , of 50 cycles per second, an effective band width, B_e , of 0.2 cycles per second, and 20 degrees of freedom. Thus at 90 percent confidence level, the true power spectrum can be between 0.62 and 1.42 times the computed value. For more details refer to McQuivey (1971a).

The intensity of turbulence was not obtained directly from the digital computer analysis because one calibration curve could not be used due to temperature variations and drift due to contamination build-up on the sensor. Knowing the local mean velocity at each measured point and using the mean voltage, the velocity/voltage calibration plot was entered. From this graph, an overheat ratio was determined. Then going to a plot of $dE/d\bar{U}$ versus velocity for various overheat ratios and knowing the mean velocity and the overheat ratio, a sensitivity, $dE/d\bar{U}$, could be determined. Then the relation

$$\sqrt{e^2} = \frac{dE}{d\bar{U}} \sqrt{u^2} \quad (1)$$

could be used to determine the intensity of turbulence, where $\sqrt{e^2}$ is the digitally obtained root-mean-square of the voltage fluctuations, $dE/d\bar{U}$ is the sensitivity and $\sqrt{u^2}$ is the root-mean-square of the velocity fluctuations, where E is mean voltage and \bar{U} is local mean velocity.

The turbulence characteristics obtained from the data reduction are explained or defined in the following section.

EXPERIMENTAL PROCEDURES

Three sets of experiments were conducted; one over a smooth channel boundary, and two over rough boundaries. Generally, after a uniform flow was established in the channel, hydraulic, turbulence, diffusion, and dispersion characteristics were collected. Since each set of experiments occupied several days, the order in which the above data were gathered was dictated mainly by the length of time available at the start of the test run each day.

Hydraulics

Water surface slope

The bed slope was determined by using an engineer's level and the water surface level was measured by means of a point gauge mounted on the carriage. Water surface and bed elevation were measured at 12 foot intervals. At each station the screwjacks located under the flume in pairs were adjusted and the process was repeated for all stations until a uniform slope was obtained. The slope of the energy grade was then calculated from the least square fit of a straight line to the water surface as well as the bed bottom slope data.

An estimate of accuracy in the water slope measurement is about 0.001 inch per 12 feet or ± 0.00007 . The slope of the smooth bed flow was 0.0000928 and those for the two rough boundaries were 0.000324 and 0.000443.

Water discharge

The water discharge from the flume was determined in the supply pipeline with a calibrated orifice meter connected to a water-mercury manometer. Several readings were recorded to obtain a good average. The water flow rate was fixed for each set of experiments and ranged from 3.07 to 3.67 cubic feet per second.

Water temperature

The water temperature was measured to the nearest one-tenth of a degree Centigrade with a mercury thermometer. The temperature reported was based on an average of about 10 readings obtained during data collection. In general, there was little variation among these readings as the reservoir water temperature was relatively constant for the short duration of the experiment. The water temperature for the smooth channel test was 5.2°C and for the rough boundary conditions, the average water temperature was 2.7°C.

Average depth of flow

The depth of flow over the smooth boundary was just the depth from the channel bed to the water surface. For flow over the rock roughnesses the depth was measured with respect to a reference plane above the channel bed and somewhat below the rock top. For flow over the 3/4 inch rock roughness, the reference plane was taken 1/4 inch below the average tops of the rocks. For flow over the river bed, the reference plane was taken 1/2 inch below the average tops of the rocks. The average heights of the rocks were measured by laying down a flat surface over the rock bed and measuring the spacing between it and the channel bed bottom. A rough check against the measured velocity distribution in the channel was made to enable a reasonable estimate of the channel depth.

An attempt was made to keep the water depth nearly one foot. For reporting the data, dimensionless depths were introduced by dividing all measured depths by the total water depth.

Mean velocity

The mean velocity reported was determined from the observed values of discharge Q , average depth D , and the width W , by use of the continuity equation

$$V = \frac{Q}{A} = \frac{Q}{D \times W} \quad (1)$$

An attempt was made to keep the magnitude of the velocity on the order of one foot per second. For the three sets of experiments conducted, the mean velocity varied between 1.036 and 0.849 feet per second.

Velocity profiles

Profiles of the local mean velocity were obtained with a pitot tube, a pressure transducer, and a transducer indicator. For each boundary condition a series of profiles were taken down the center line of the channel to determine if flow was fully developed at the test section. Fully developed velocity profiles were obtained about 75 feet downstream of the channel entrance from the smooth boundary conditions. Somewhat less distance was needed for the flow development in the rough boundary condition. All tests were therefore performed in the section of the channel beginning at 75 feet downstream of the entrance.

Turbulence

RMS-turbulent velocity

The root-mean-square of the longitudinal turbulent velocity was measured directly by means of a true root-mean-square voltmeter. The values so obtained were used for comparison with the calculated root-mean-square velocity from the digital processing of the measured turbulent velocity records.

Instantaneous turbulent velocity

With a single hot-film sensor, turbulent velocity data were obtained at several depths in the vertical direction so that the profile of the turbulent intensity, correlation, spectrum, and scales could be determined. Two hot-film sensors were used to obtain space and space-time correlation measurements.

The location of the profiles taken by a single hot-film sensor were half way between the center line and the wall at longitudinal station 75 where the injector nozzles were located. A profile was then taken at the center line at the same station.

Vertical profiles of approximately 20 points were taken on center line and half way between the center line and the wall at station 75.

In the next set of measurements two hot-film sensors were operated simultaneously to record instantaneous turbulent velocity data. One probe was placed at a fixed position at station 75 and the other was moved laterally, vertically, or longitudinally at appropriate stations from point to point. Longitudinal data included seven stations at 2-foot intervals (that is 2 thru 14 feet total spacing) at each of three elevations below the water surface. Lateral data included seven stations at 3-inch spacing at each of the three elevations below the water surface. Vertical data consisted of 11 sets of measurements on 5 points below the water surface at center line. Measurements were taken in such a way as to allow each of the 5 points to be correlated with the other four.

Turbulent Flow Parameters

Based on the measured turbulent velocity fluctuations many important turbulent characteristics were obtained from the digital analysis of the time-series records. The choice of appropriate averaging time for these analyses will be discussed in some detail in the section under analog to digital conversion. The time-series records were recorded for three minutes and the AC components of the anemometer output were recorded on FM tape. Other relevant items were the mean anemometer output voltage and the root-mean-square voltmeter output.

The turbulent parameters calculated and reported here are:

Turbulent velocity variance

The longitudinal turbulent velocity variance is

$$\overline{u^2} = \overline{(U - \bar{U})^2} \quad (2)$$

where: U is the instantaneous turbulent velocity and

\bar{U} the local mean velocity as obtained from the pitot tube measurements.

Turbulent intensity

The square root of the velocity variance is defined as the turbulent intensity. The relative turbulent intensity can be defined by dividing $\sqrt{\overline{u^2}}$ by the local mean velocity, that is $\sqrt{\overline{u^2}}/\bar{U}$. A somewhat different definition of relative intensity is obtained by dividing $\sqrt{\overline{u^2}}$ by the shear velocity, that is, $\sqrt{\overline{u^2}}/U_*$.

Auto correlation function

Single-point time auto correlation of the longitudinal turbulent velocity fluctuations were obtained from time-series records according to the definition

$$R(\tau) = \frac{\overline{u(t) u(t + \tau)}}{\overline{u^2}} \quad (3)$$

where u is the instantaneous random velocity fluctuation above the mean and τ and t refer to time.

Space correlation function

The double point simultaneous space correlation of the longitudinal turbulent velocity with respect to a separation of the sensors in the three coordinate axes were calculated from;

$$R_u(x) = \frac{\overline{u(\xi) u(\xi+x)}}{\sqrt{\overline{u^2(\xi)}} \sqrt{\overline{u^2(\xi+x)}}} \quad (4)$$

where ξ is the separation distance and x refers to the longitudinal axes. Definitions for $R_u(y)$ and $R_u(z)$ for the vertical and lateral correlations can be reckoned in a similar way.

Space-time correlations function

The two point space-time correlation of the longitudinal velocity fluctuation were calculated according to:

$$R_u(\xi, \tau) = \frac{\overline{u(x, t) u(x+\xi, t+\tau)}}{\sqrt{\overline{u^2(x, t)}} \sqrt{\overline{u^2(x+\xi, t+\tau)}}} \quad (5)$$

Turbulent scales

Integral scales were obtained from the correlation functions by a simple integration. These are the integral time scales T_E

$$T_E = \int_0^{\infty} R(\tau) dt \quad (6)$$

and the integral space scales L_x

$$L_x = \int_0^{\infty} R_u(x) dx \quad (7)$$

Turbulent-microscale was obtained from Fourier cosine transform of the correlation functions according to

$$\lambda_x = 2 \left[\int_0^{\infty} k^2 \left[\frac{2}{\pi} \int_0^{\infty} R_u(x) \cos kx dx \right] dk \right]^{-1} \quad (8)$$

where k is the turbulent wave number.

Jet Diffusion

In two separate series of tests, neutrally buoyant salt solutions and heated water were injected into the channel parallel to the direction of flow. The injector nozzles were submerged to one-half the depth of flow at the channel centerline 75 feet from the flume entrance. Three different nozzle diameters were used. The inside diameter of the nozzles were 0.468 cm, 1.094 cm, and 1.882 cm. Injection velocities were varied so that a large range of jet Froude number and jet to ambient velocity ratios were obtained. The latter quantity is referred to as the jet strength and is denoted by K . The jet Froude number is defined by

$$F = \frac{U_{\text{jet}}}{\sqrt{\frac{\Delta\rho}{\rho_f} g d_j}}$$

where U_{jet} is the jet velocity, $\Delta\rho$ is the density difference between the jet water and the ambient, ρ_f is the ambient density, g is the gravitational acceleration, and d_j the inside diameter of the nozzle. In these experiments the jet strength varied between 0.3 and 10 and the jet Froude number varied between 4 and 200.

The hot water diffusion sequence began with stabilizing the system temperature 2 to 3 hours before measurements were begun. The water heater was turned on and flow at injection temperature was initiated through the injection system. This insured that the 75 ft of plumbing between the heater and the injection point would be at equilibrium temperature when data were being taken.

After the system stabilized the injection temperature was measured. This was done by running the heated water from the nozzle being used into an insulated container for 3-5 minutes. The temperature of the water in the container was then measured with an accurate thermometer. It was found that for an indicated temperature of 75°F on the thermo-static mixing valve a temperature of 74.6°F was produced at the injection point. This temperature was maintained for all runs. This gave a temperature difference of approximately 30°F between flowing and injected water.

After measuring the injection temperature the conductivity probe was checked for maximum response. The insulated container was filled with water at injection temperature and the output voltage of the carrier amplifier was recorded. This full deflection provided a simple check on the proper operation of the conductivity probe.

After the probe was checked for full-scale response, it was mounted on the traversing mechanism. The nozzle discharge was then adjusted to the desired value and data taking commenced. First, a vertical temperature profile at the center line was taken at a desired distance downstream of the nozzle. The vertical location of the maximum temperature was taken to determine the location of the peak of the temperature distribution at this plane. From this point the probe was traversed horizontally once to the left and then to the right of the temperature peak. In general, the temperature maxima in the measured horizontal and vertical profiles were identical thus assuring the validity of the assumed location for the peak. In several instances, this did not happen and the maxima were somewhat different. Such data are reported herein and should be properly interpreted.

Temperature profiles were generated by having one man traverse the probe in steps calling out the location at each step while the second man marked the location on a strip chart recording of the carriage amplifier output voltage. Data were taken at intervals downstream until the response limit of the probe was reached or when vertical mixing became complete. This process was repeated for full jet strength for each of the three nozzles.

The salt solution diffusion sequence began with mixing a 500-gal. tank of dispersant. After the solution was prepared, the cooling water and stirring motor were turned on and the temperature allowed to stabilize. The tank was then pressurized and data taking commenced. Full scale deflection in the salt solution was checked and a procedure identical to that for the temperature profile was used to collect the concentration profiles. As nearly as possible the nozzle discharges used for the salt solution were held the same as those used for hot water.

A minimum of 5 sets (vertical and horizontal) of profiles downstream of the injection point were collected for most of the nozzle discharge. These data are reported as DT , the temperature difference or C , the concentration versus dimensionless depth or width. Based on these data the variance of the temperature and concentration distribution were calculated as follows:

Variance A

The variance of each experimental temperature concentration or dye distribution was determined by two methods. The first referred to as variance A was simply the standard statistical definition, i.e.,

$$\sigma_y^2(x) = \frac{1}{N} \sum_{j=1}^n c_j (y_j - \bar{y})^2$$

where $N = \sum_{j=1}^n c_j$, N is the number of data points in the y -plane, \bar{y} is the mean location of the concentration distribution, and c_j is the concentration of dispersant at $y = y_j$. Similar formulae hold for the variance in the z direction. For the variance of the temperature distributions the same definition is used but with c_j replaced by DT_j . The latter is the mean difference between the ambient stream temperature and the temperature at point y_j in the dispersing plume.

Variance B

The second calculation referred to as variance B is defined so that it accounts for a reflection of the plume from the sidewall, water surface or channel bed. Based on the assumption that the temperature or concentration distribution of a dispersing plume approaches normality at large distances from the source the variance becomes

$$\sigma^2 = \frac{1}{2\pi [C_{\max} \text{ or } DT_{\max}]^2}$$

where C_{\max} and DT_{\max} are the peak values in a concentration or temperature profile. This formula is easily derived from the formula for a normal probability distribution.

Dispersion

The dispersion data sequence consisted of taking 12 concentration versus time profiles at stations downstream of instantaneous plane source injections at the surface. A siphon nozzle was placed at mid-depth on the centerline of the desired station. The nozzle was connected to the flow-through door on the fluorometer. Time of travel and dispersion from the intake nozzle to the fluorometer was taken into account. The full scale output of the fluorometer was adjusted to give full scale deflection of the chart recorder. The chart recorder was set at an appropriate speed which was determined by trial and error. Then one gallon of dispersant was injected into the plume. The instant of injection and the point of entry of the dispersant cloud into the siphon (eye-ball estimate) were recorded on the chart. This procedure was repeated at station 10, 20, 30, 40, 50, and 60 feet downstream from the injection point. After reaching station 60 all measurements were repeated in the reverse order starting now from station 60.

These data were used to estimate the one-dimensional longitudinal dispersion coefficient (D_x) which is a measure of a stream's ability to spread slugs of pollutants once vertical and lateral mixing are complete.

The first step in the reduction of the dispersion data was to convert the analog concentration (voltage) versus time curve to digital punch card form. A minimum of 40 points were digitized on each curve.

The second step in the reduction was a statistical analysis of the digital data. The mean standard deviation and variance were determined for all the curves.

The final step was the calculation of dispersion coefficient from the relationship

$$D_x = \frac{\overline{V^3}}{2} \frac{d\sigma_t^2}{dx}$$

this was done by fitting a least squares line through σ_t^2 versus x plots to determine $d\sigma_t^2/dx$.

PRESENTATION OF DATA

The purpose of this section is to present a brief description of the tabulated data and the figures.

Table 1 summarizes the hydraulic parameters measured and calculated. The headings have been defined and discussed in a previous section. Table 2 summarizes the dispersion data obtained over the three boundary roughnesses. Table 3 presents the velocity profiles, intensity of turbulence, Eulerian time scales and the macroscale of turbulence at the flume center line and half way between the flume center line and the side wall.

Tables 4 through 9 summarize the basic data of the turbulent diffusion studies. Table 4 presents the vertical and lateral distributions over the smooth boundary for the heated water. DT is the rise in temperature in degrees centigrade above the flow field. Y/D is the relative depth and Z/HW is the relative width. Also given are: the jet strength, the station in feet from the source, the jet Froude number, the nozzle description and inside diameter, the relative depth where the maximum temperature occurred, the lateral or vertical dimensionless coordinate of the profile mean, and variances A and B for each profile taken.

Table 5 presents the vertical and lateral distribution of concentration over the smooth boundary. Jet Froude number is meaningless because the tracer and flow have the same densities. The other parameters are still applicable.

Table 6 and 7 represent the vertical and lateral distributions of temperature and concentration respectively over the 3/4-inch rock roughness.

Tables 8 and 9 present the vertical and lateral distributions of temperature and concentration respectively over the riverbed roughness.

Figure 12 illustrates some typical diffusing plumes of salt solution for flow over the smooth boundary, with flow through the small

Fig. 12 -- Follows near here

nozzle. The jet strengths are approximately 0.75, 1.00, 3.00, 7.00 respectively in Figures 12a, 12b, 12c, and 12d.

Figure 13 illustrates some typical diffusing plumes from the medium

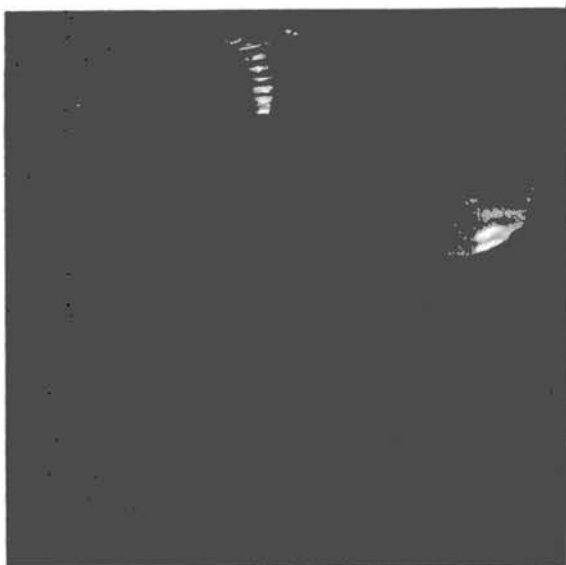
Fig. 13 -- Follows near here

nozzle over the smooth boundary. The jet strengths are approximately 0.75, 1.25, 3.00, 5.00 respectively in Figure 13a, 13b, 13c, and 13d.

Figure 14 illustrates some typical diffusing plumes from the large

Fig. 14 -- Follows near here

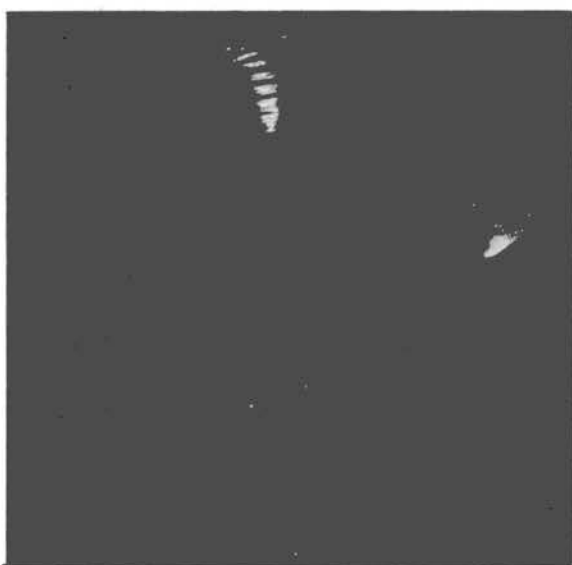
nozzle for flow over the smooth boundary. The jet strengths are approximately 0.50, 1.00, 1.75, 3.00 respectively in Figures 14a, 14b, 14c, and 14d.



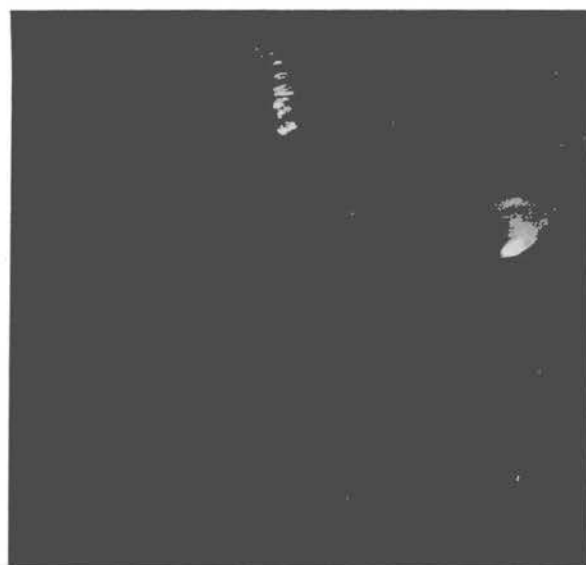
(a)



(b)

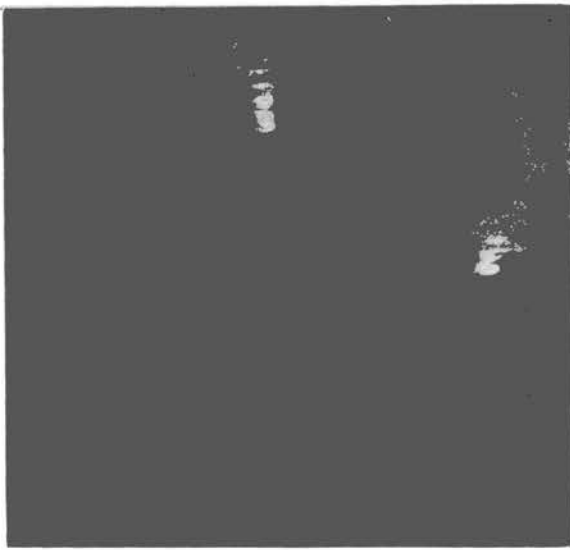


(c)

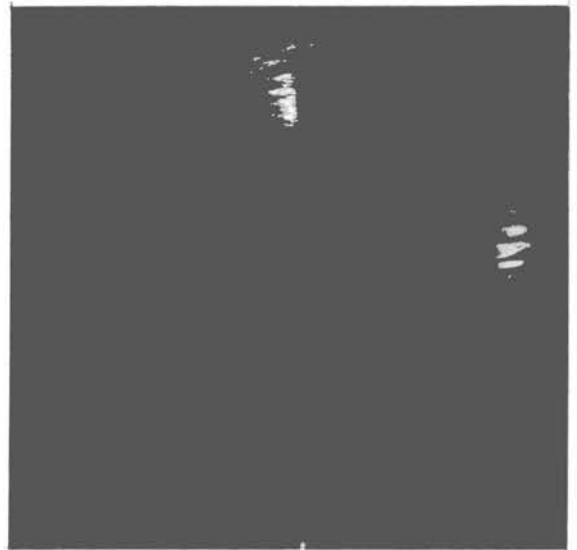


(d)

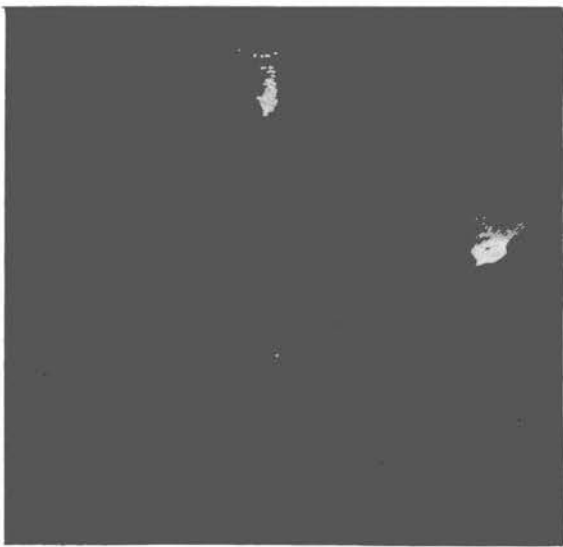
Figure 12.--Photographs of small nozzle at four jet strengths.



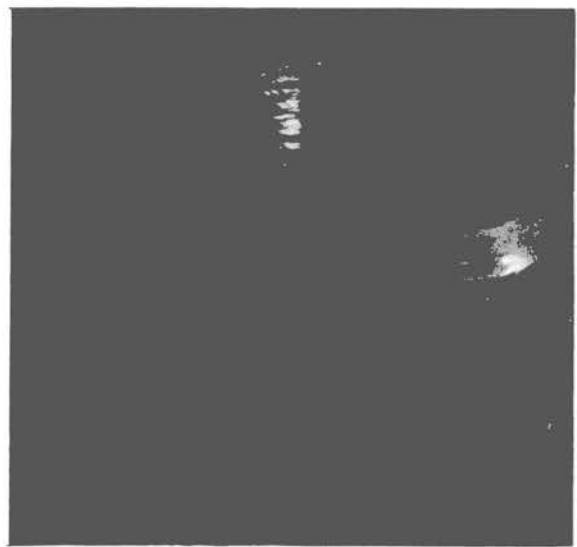
(a)



(b)

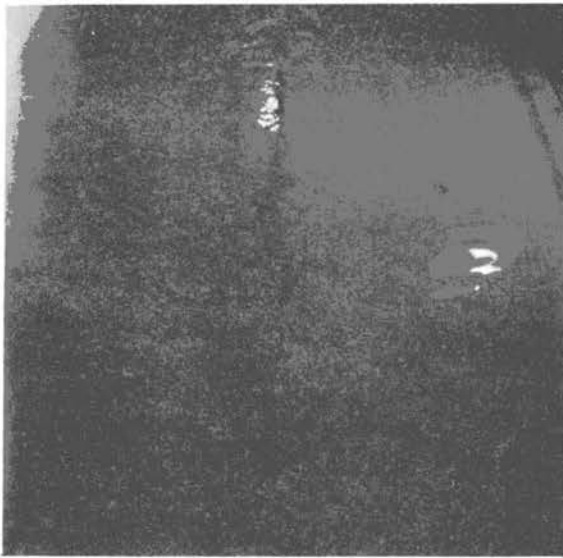


(c)

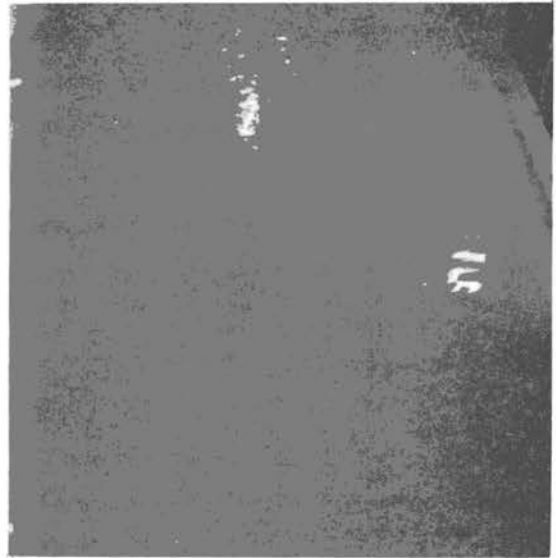


(d)

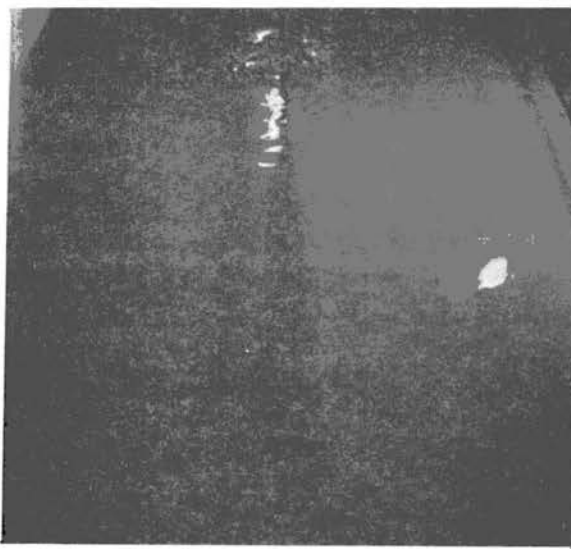
Figure 13.--Photographs of medium nozzle at four jet strengths.



(a)



(b)



(c)



(d)

Figure 14.--Photographs of large nozzle at four jet strengths.

Figures 15 through 20 illustrate some typical autocorrelation function distributions over the three boundary roughnesses. Figures

Figs. 15-20 -- Follow near here

15 and 16 are for flow over the smooth boundary at the centerline and half way between the centerline and the side wall respectively. Figures 17 and 18 are for flow over the 3/4-inch rock roughness at the centerline and half way between the centerline and the side wall respectively. Figures 19 and 20 are for flow over the riverbed roughness at the centerline and half way between the centerline and the sidewall respectively.

Figures 21 through 29 represent the space-time correlation distributions in the longitudinal direction over the three boundary roughnesses.

Figs. 21-29 -- Follow near here

Figures 21 to 23 illustrate the results over the smooth boundary at 0.15 foot, 0.45 foot, and 0.75 foot below the water surface respectively.

Figures 24 to 26 illustrate the results over the 3/4-inch rock roughness at 0.15 foot, 0.45 foot, and 0.75 foot below the water surface respectively.

Figures 27 to 29 illustrate the results over the riverbed roughness at 0.15 foot, 0.45 foot, and 0.75 foot respectively.

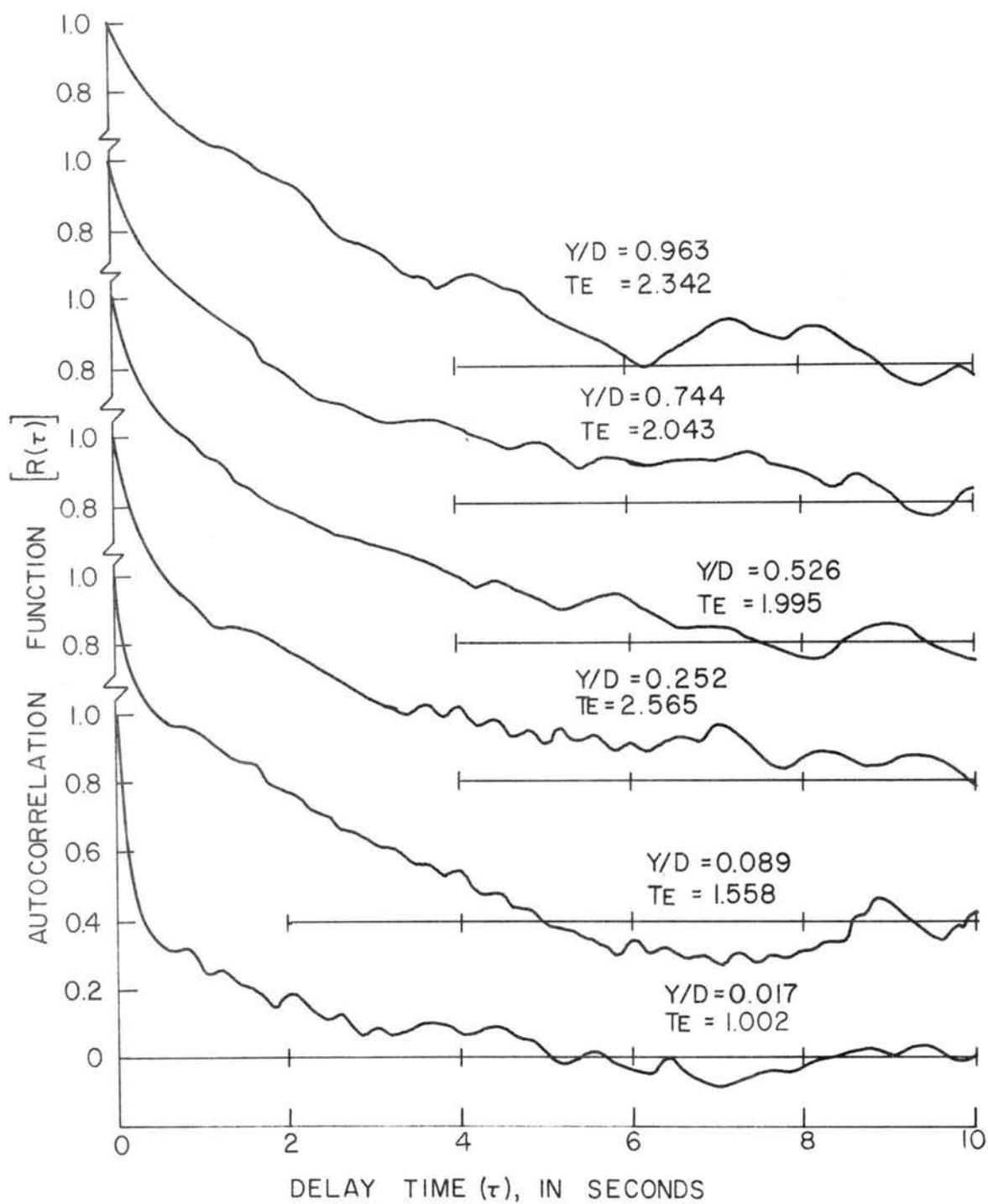


Figure 15.--Autocorrelation function distributions.

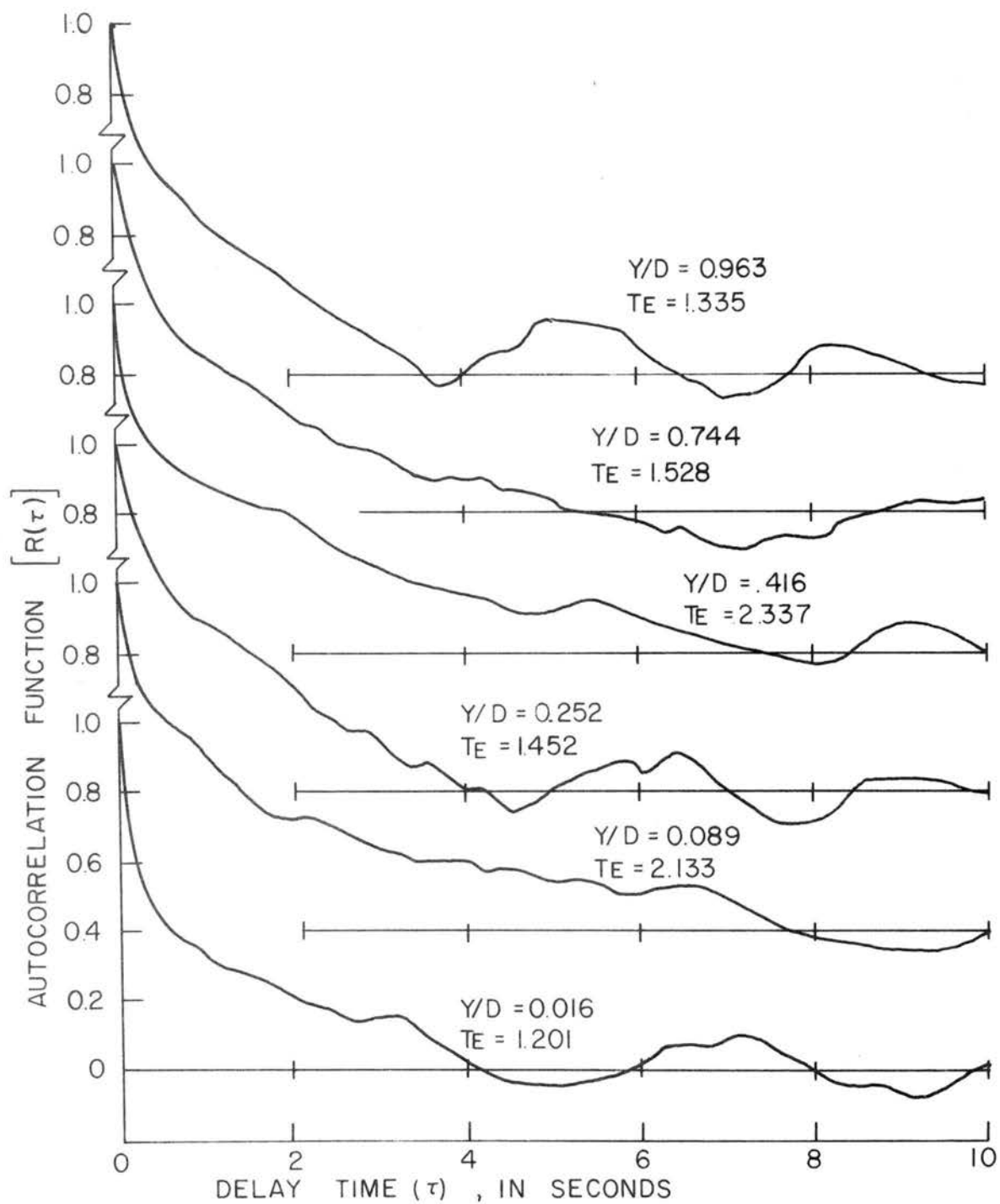


Figure 16.--Autocorrelation function distributions.

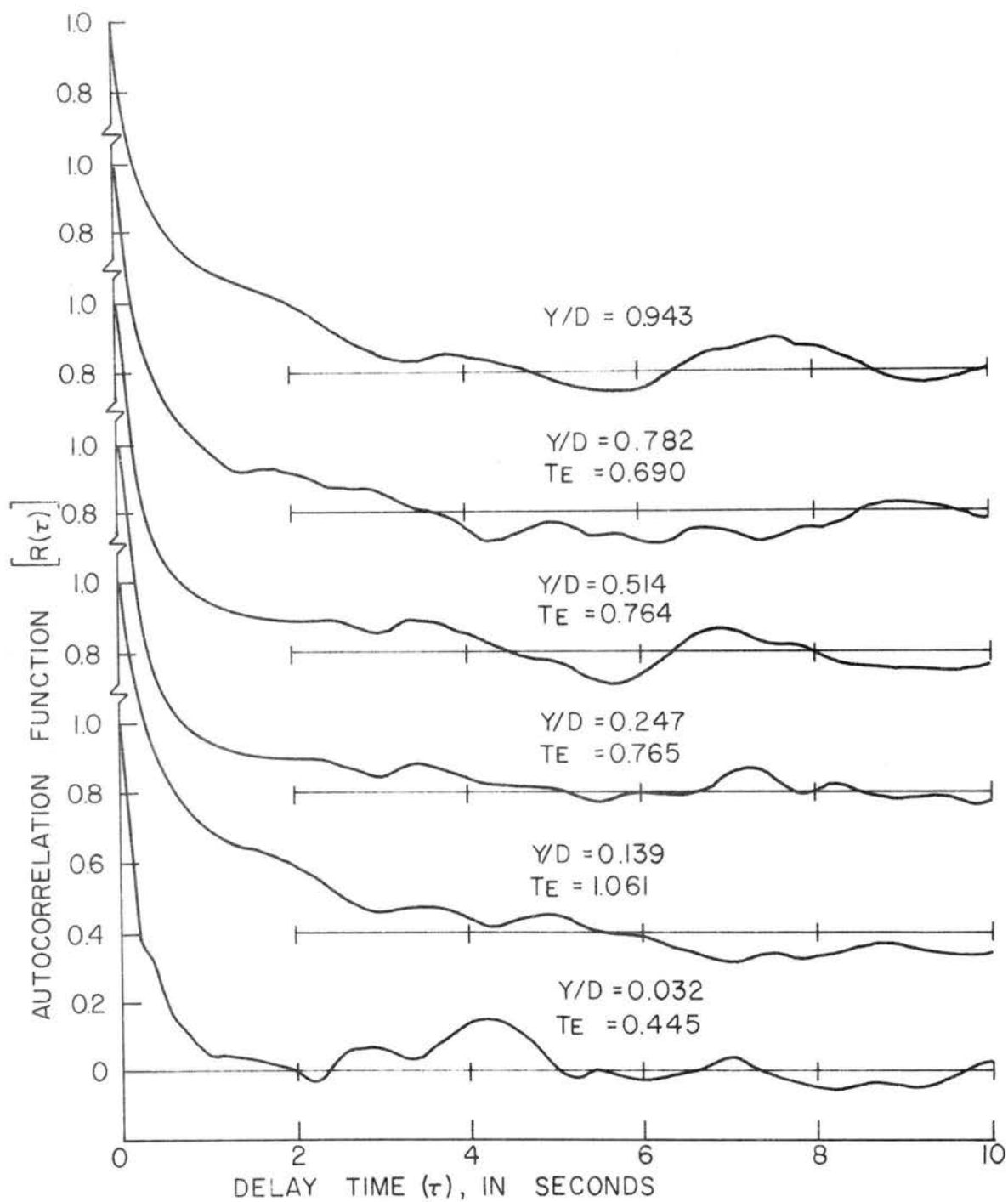


Figure 17.--Autocorrelation function distributions.

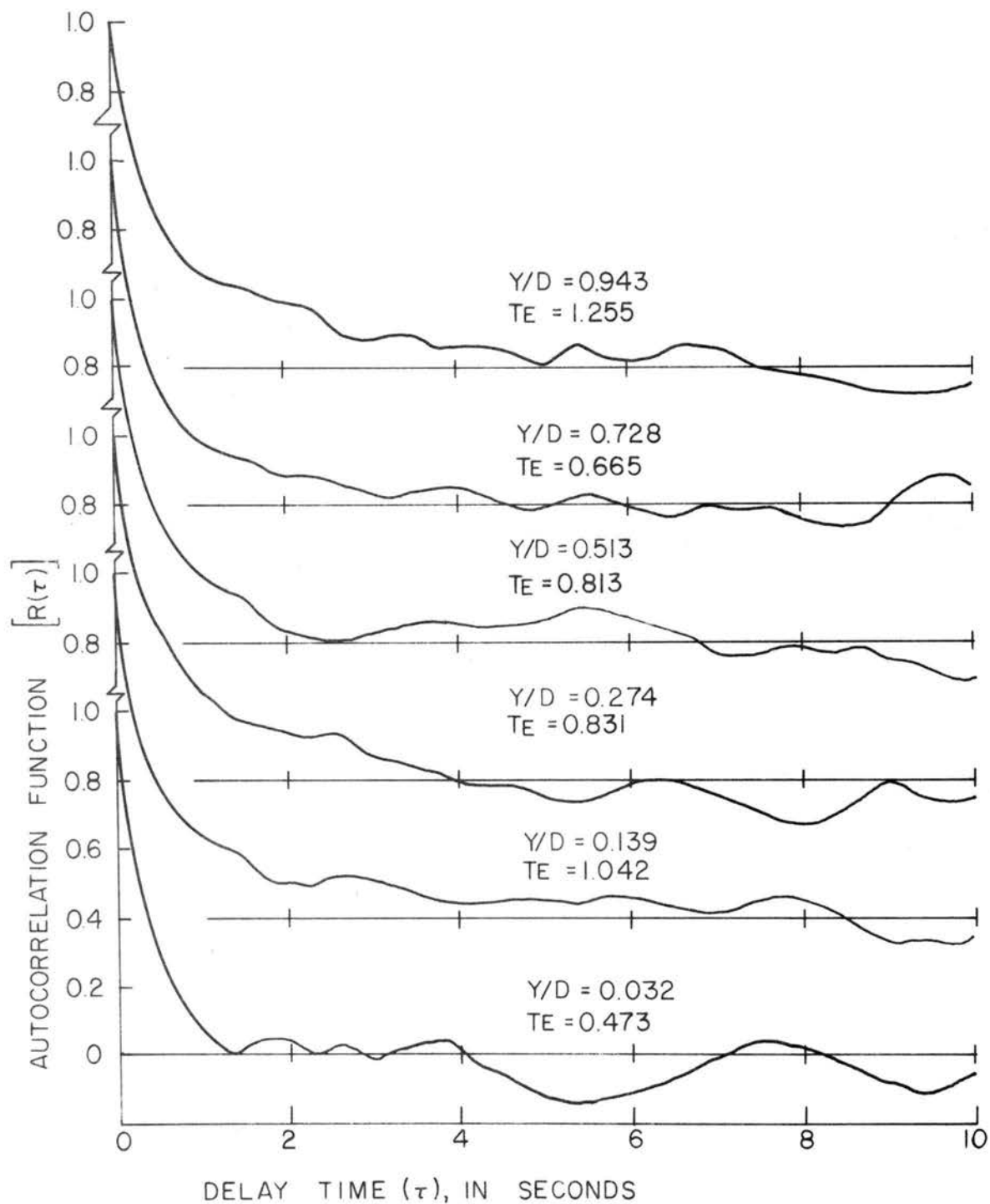


Figure 18.--Autocorrelation function distributions.

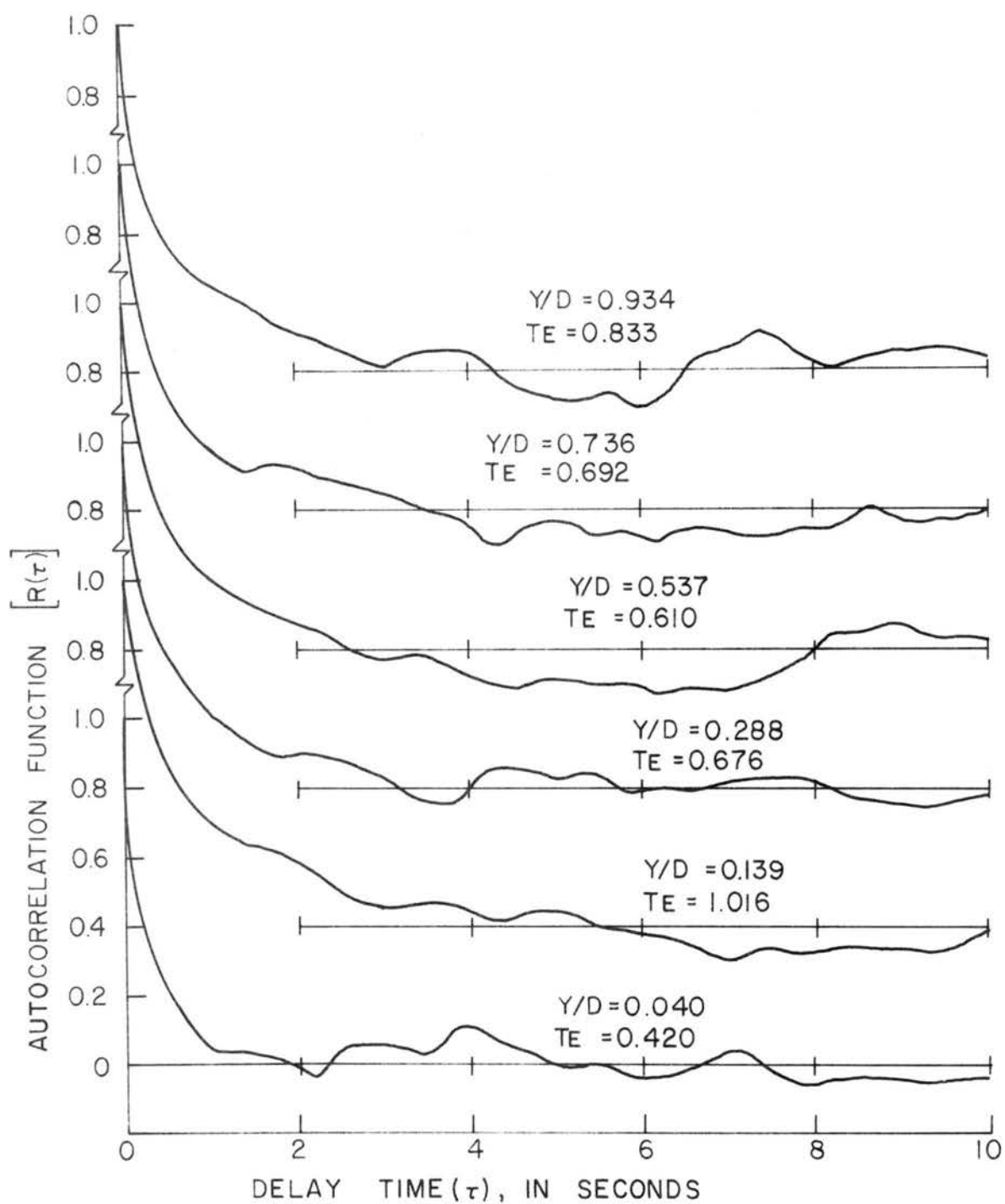


Figure 19.--Autocorrelation function distributions.

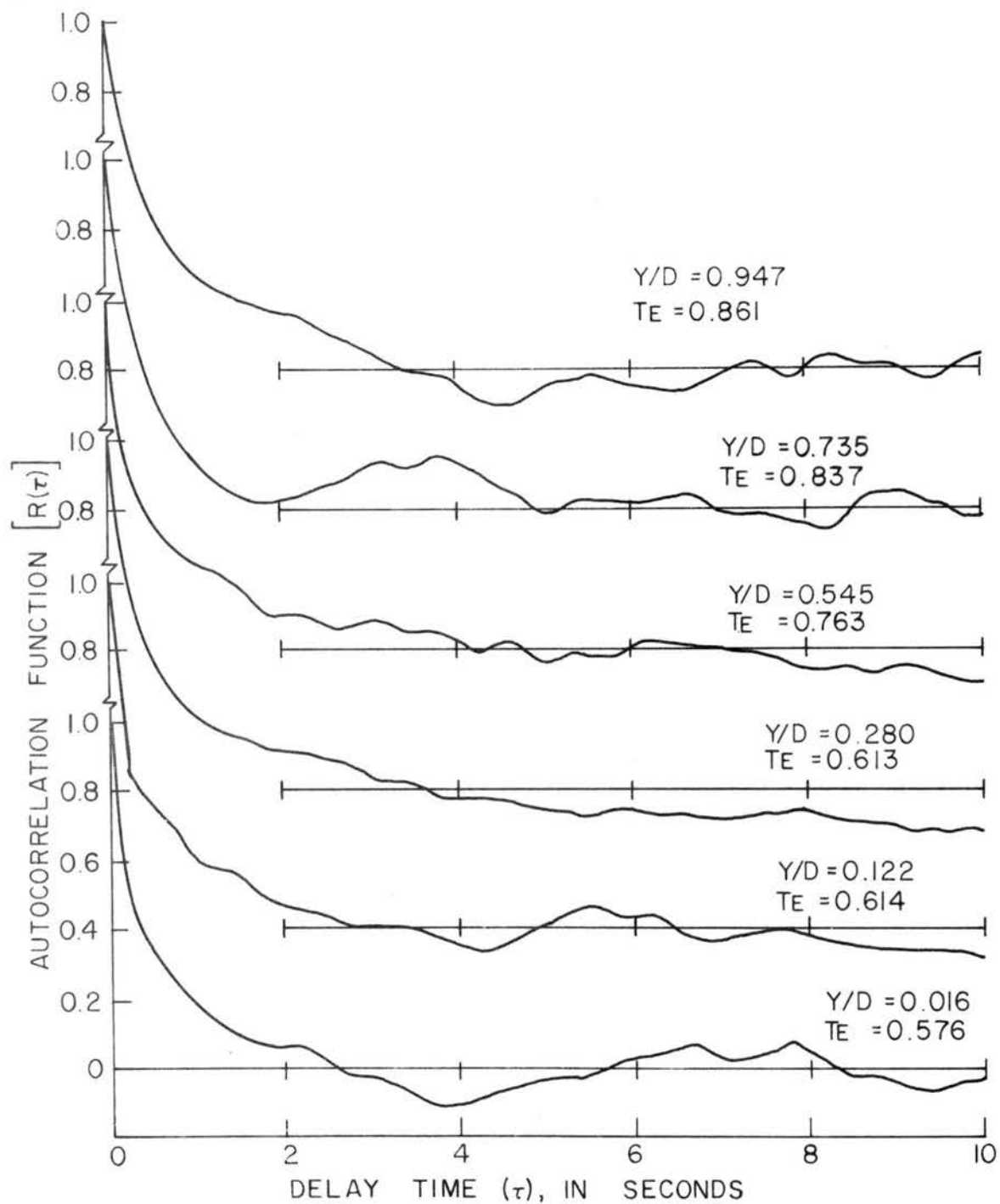


Figure 20.--Autocorrelation function distributions.

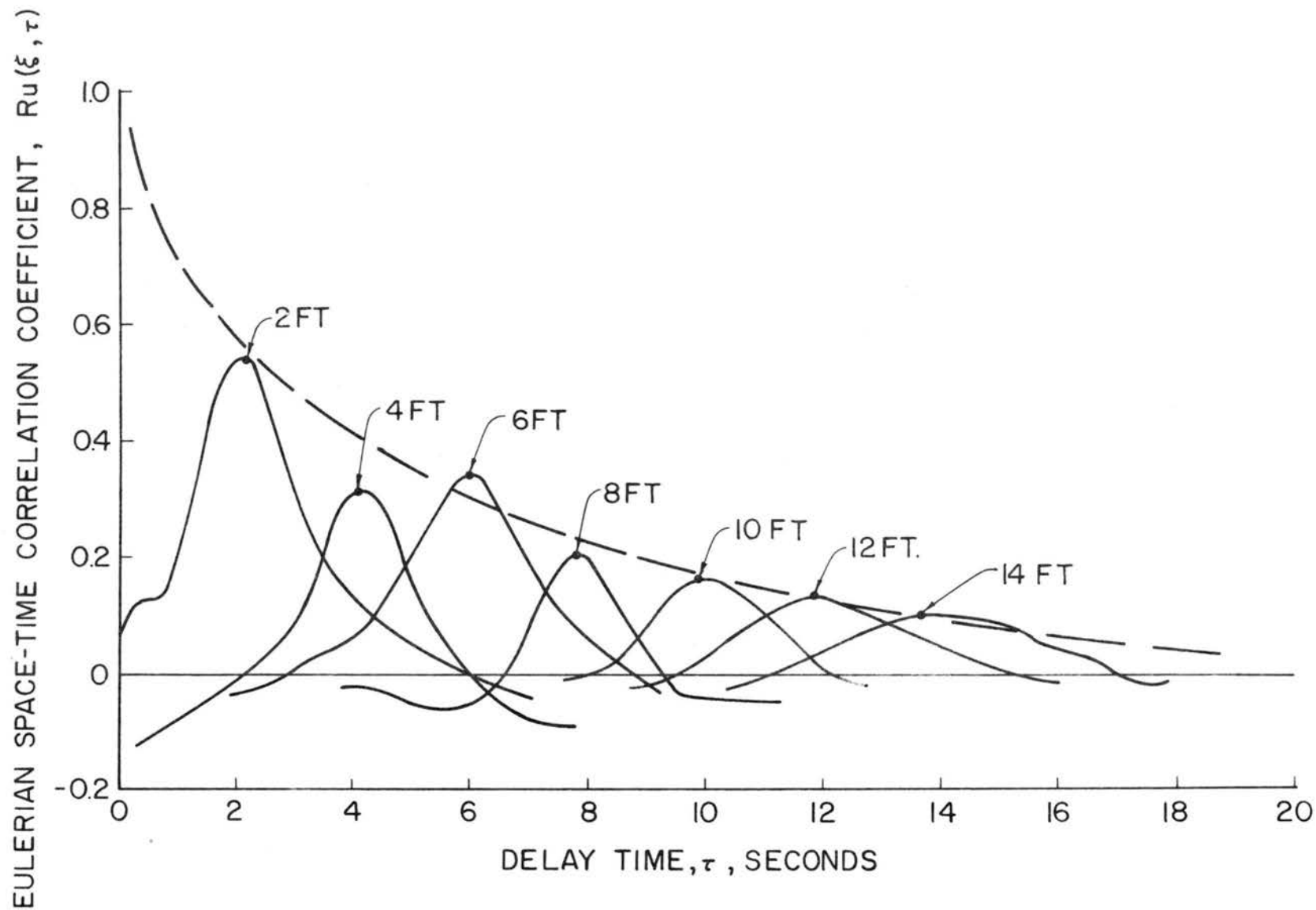


Figure 21.--Longitudinal space-time correlation distributions.

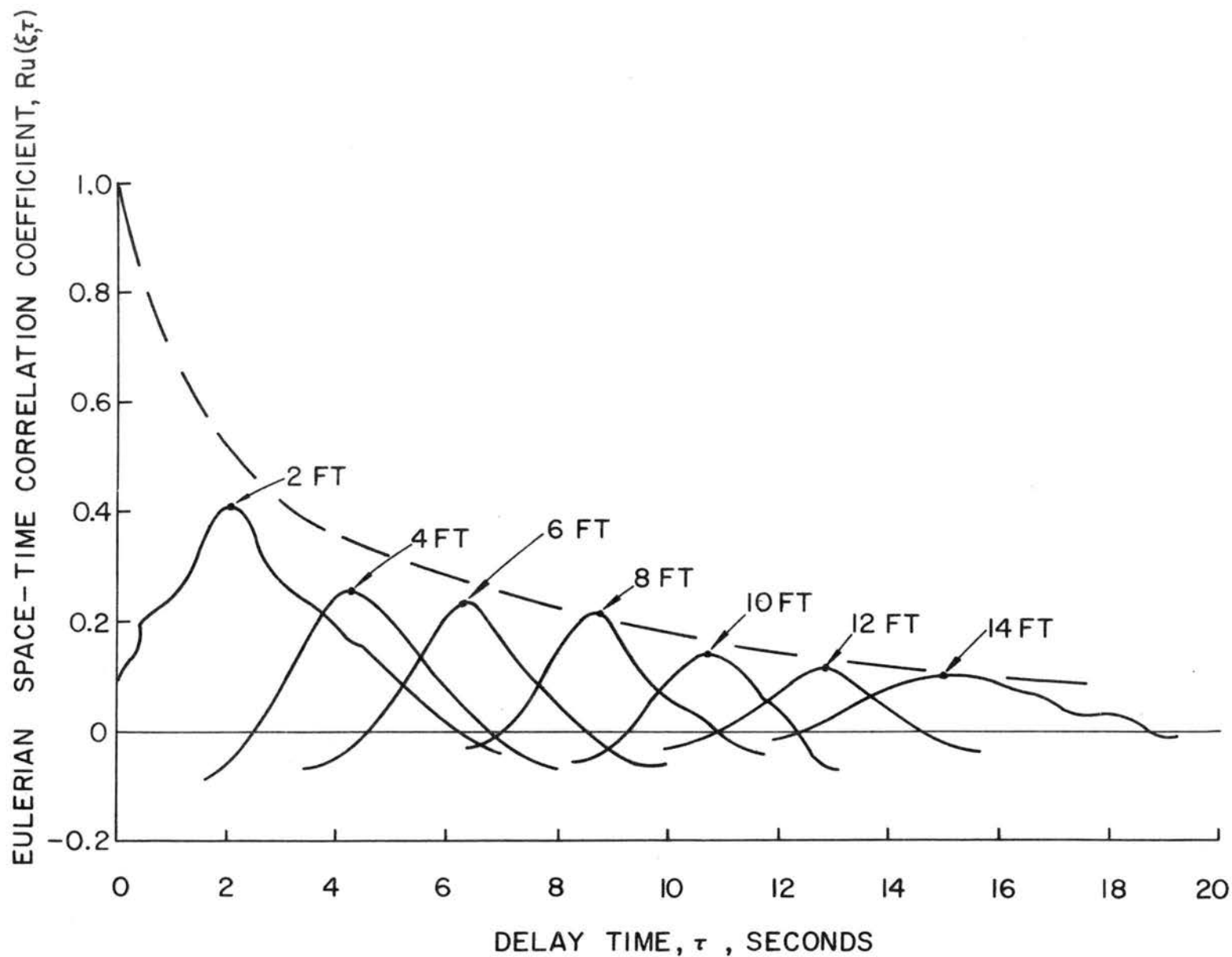


Figure 22.--Longitudinal space-time correlation distributions.

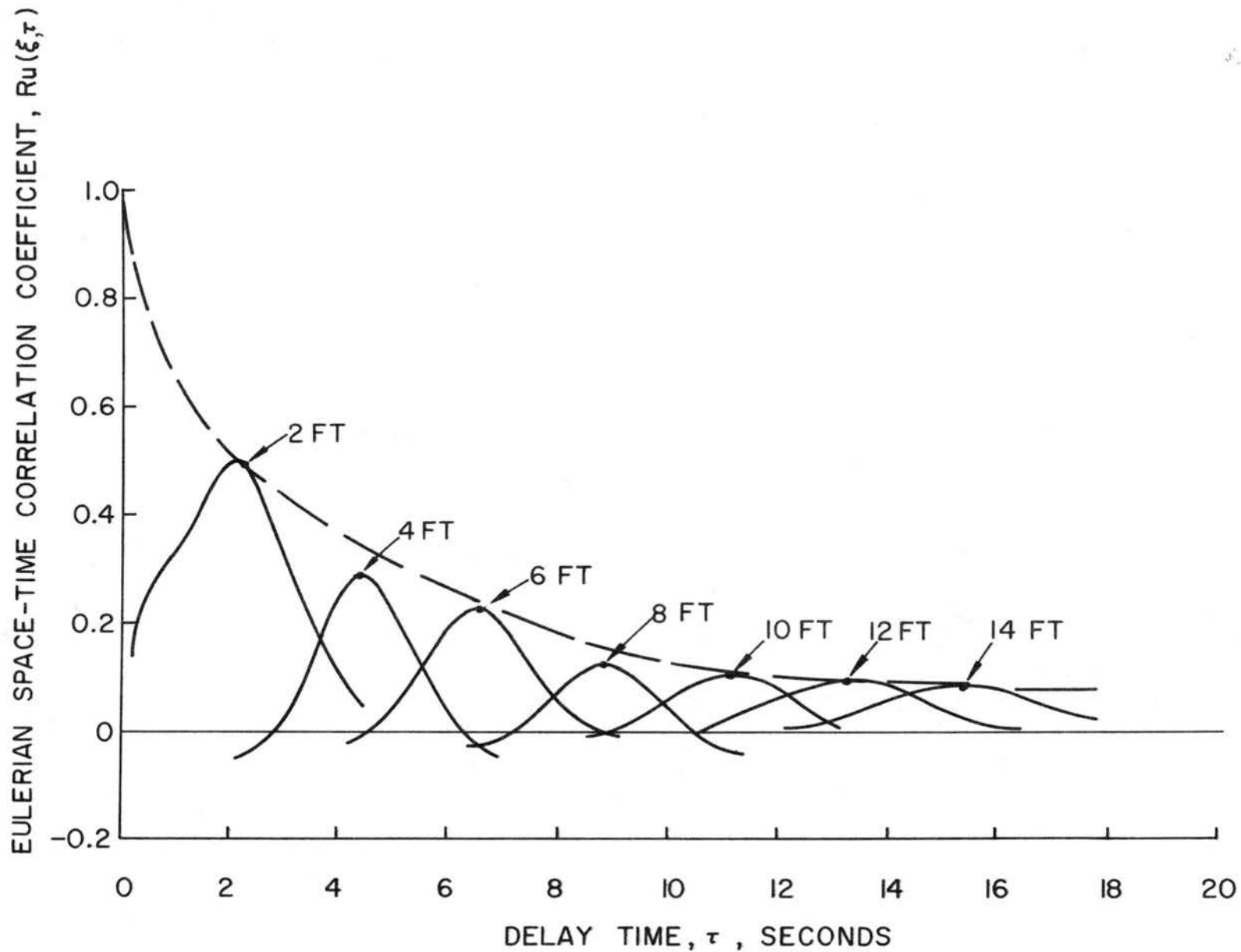


Figure 23.--Longitudinal space-time correlation distributions.

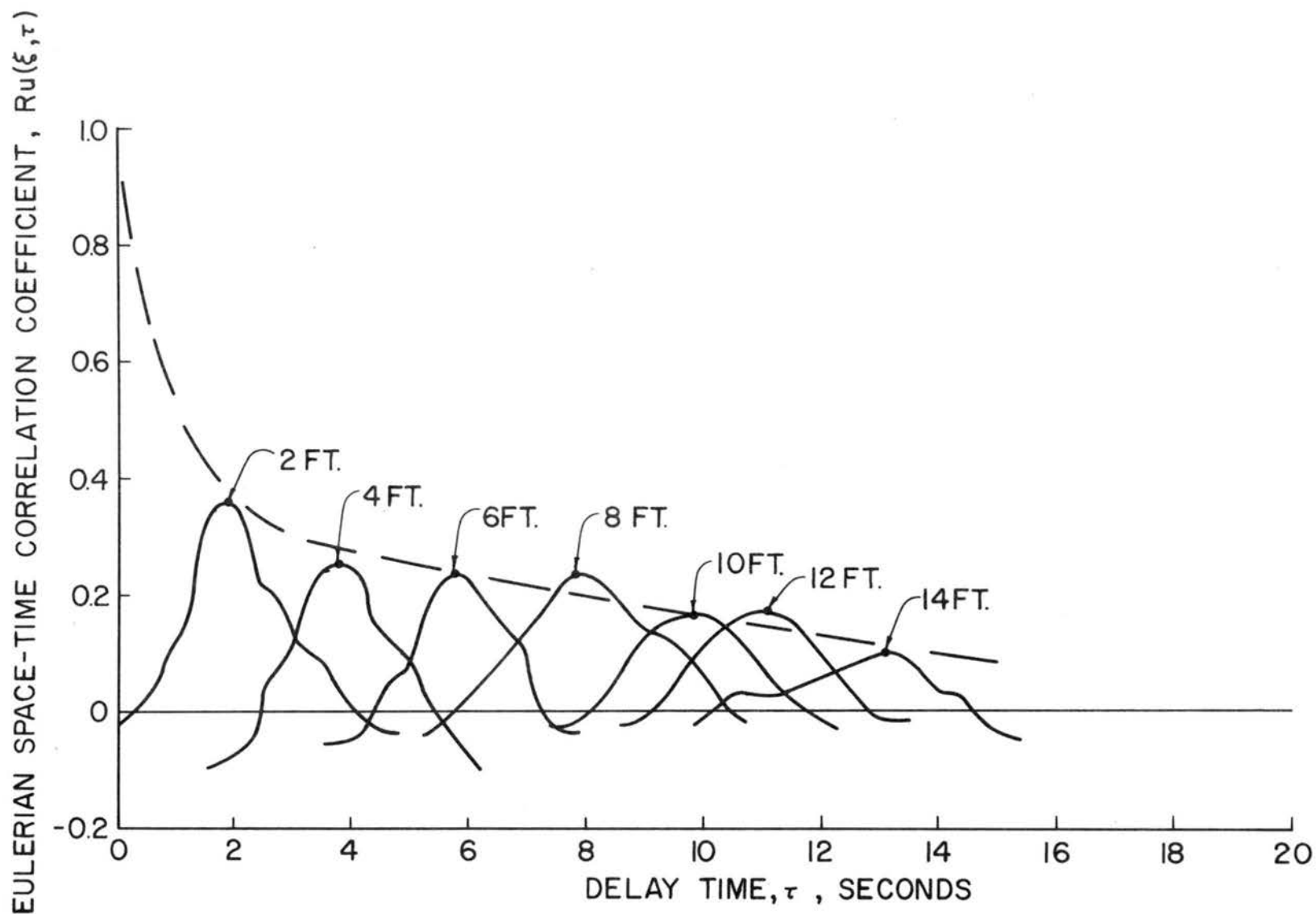


Figure 24.--Longitudinal space-time correlation distributions.

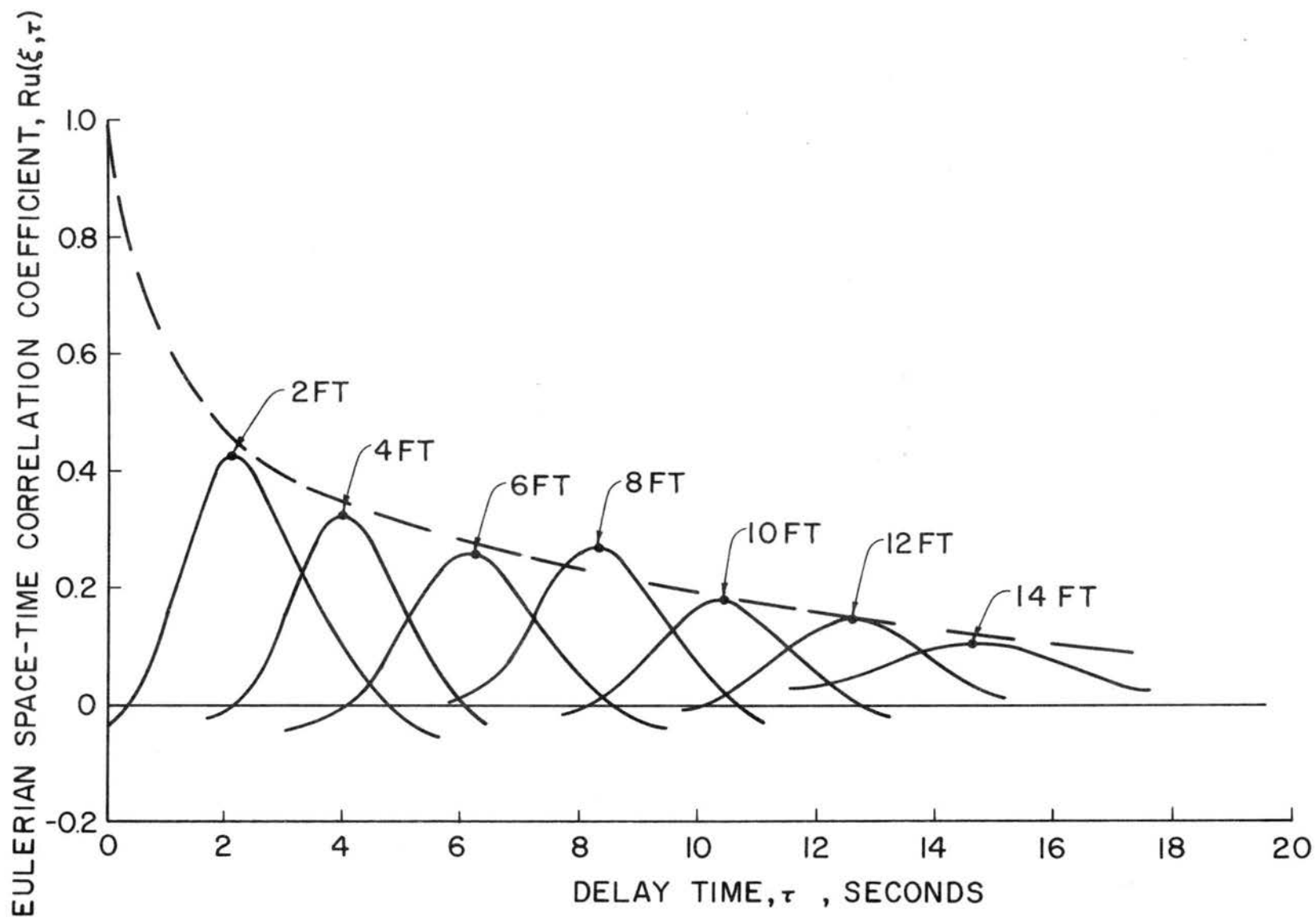


Figure 25.--Longitudinal space-time correlation distributions.

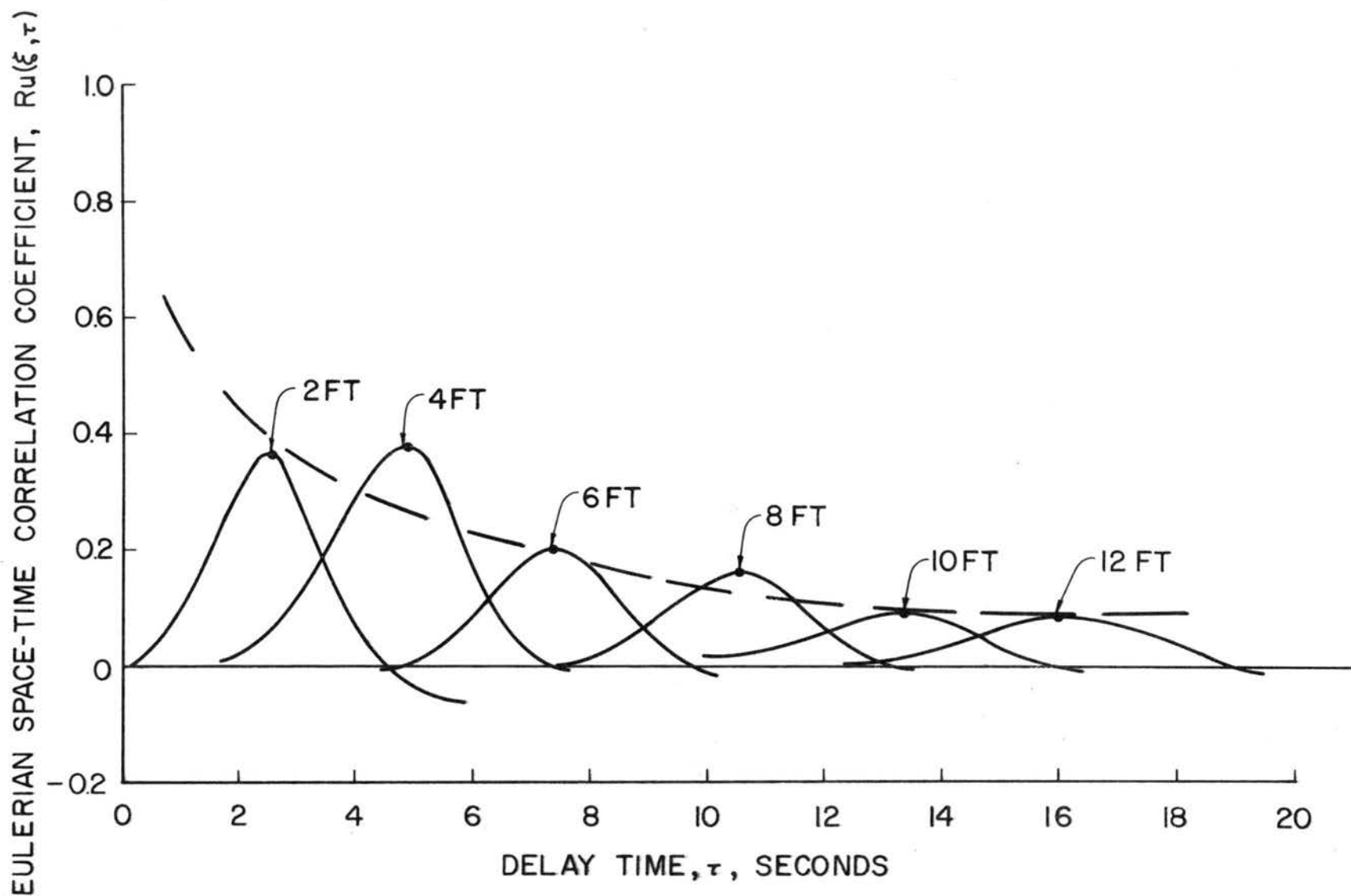


Figure 26.--Longitudinal space-time correlation distributions.

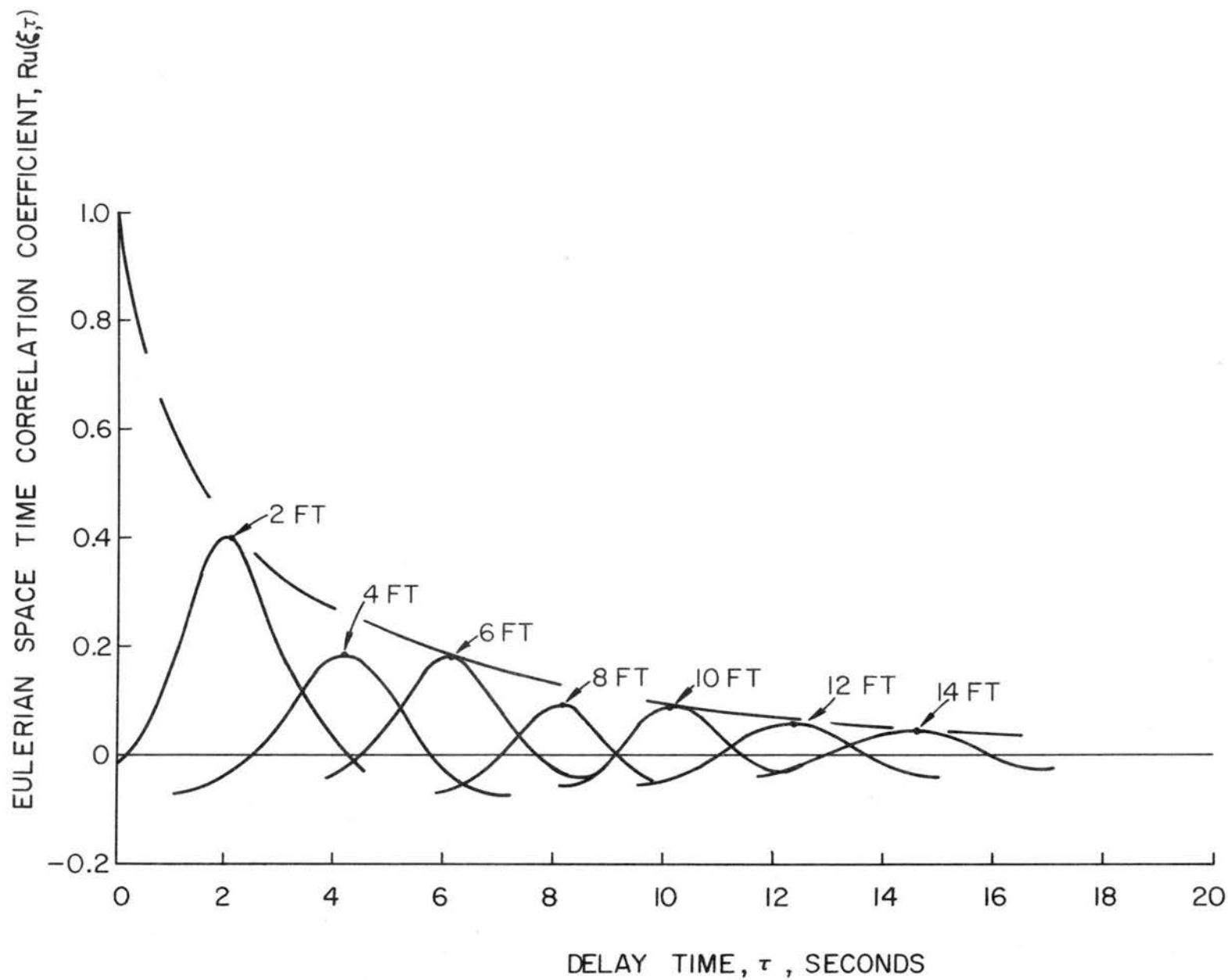


Figure 27.--Longitudinal space-time correlation distributions.

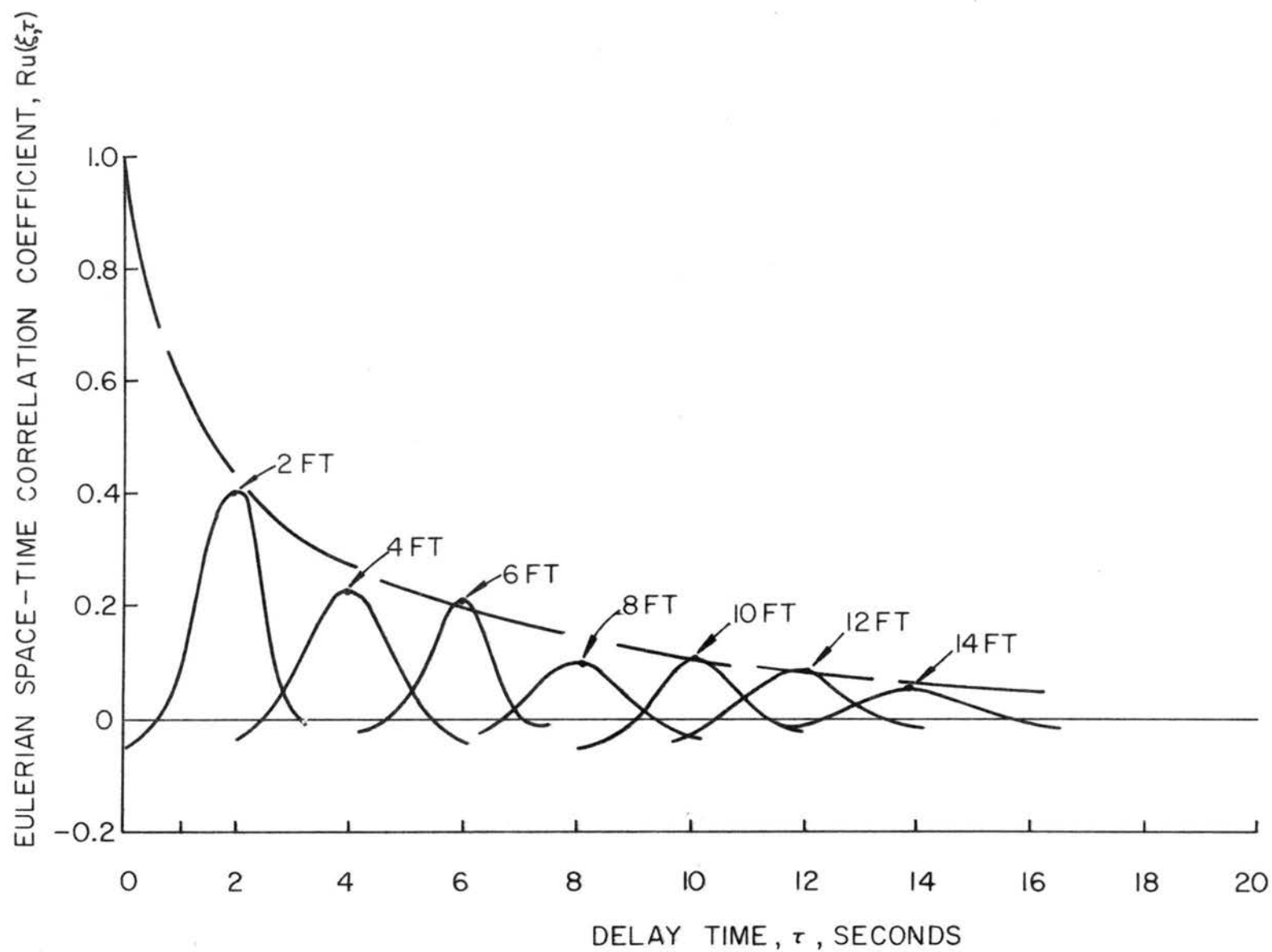


Figure 28.--Longitudinal space-time correlation distributions.

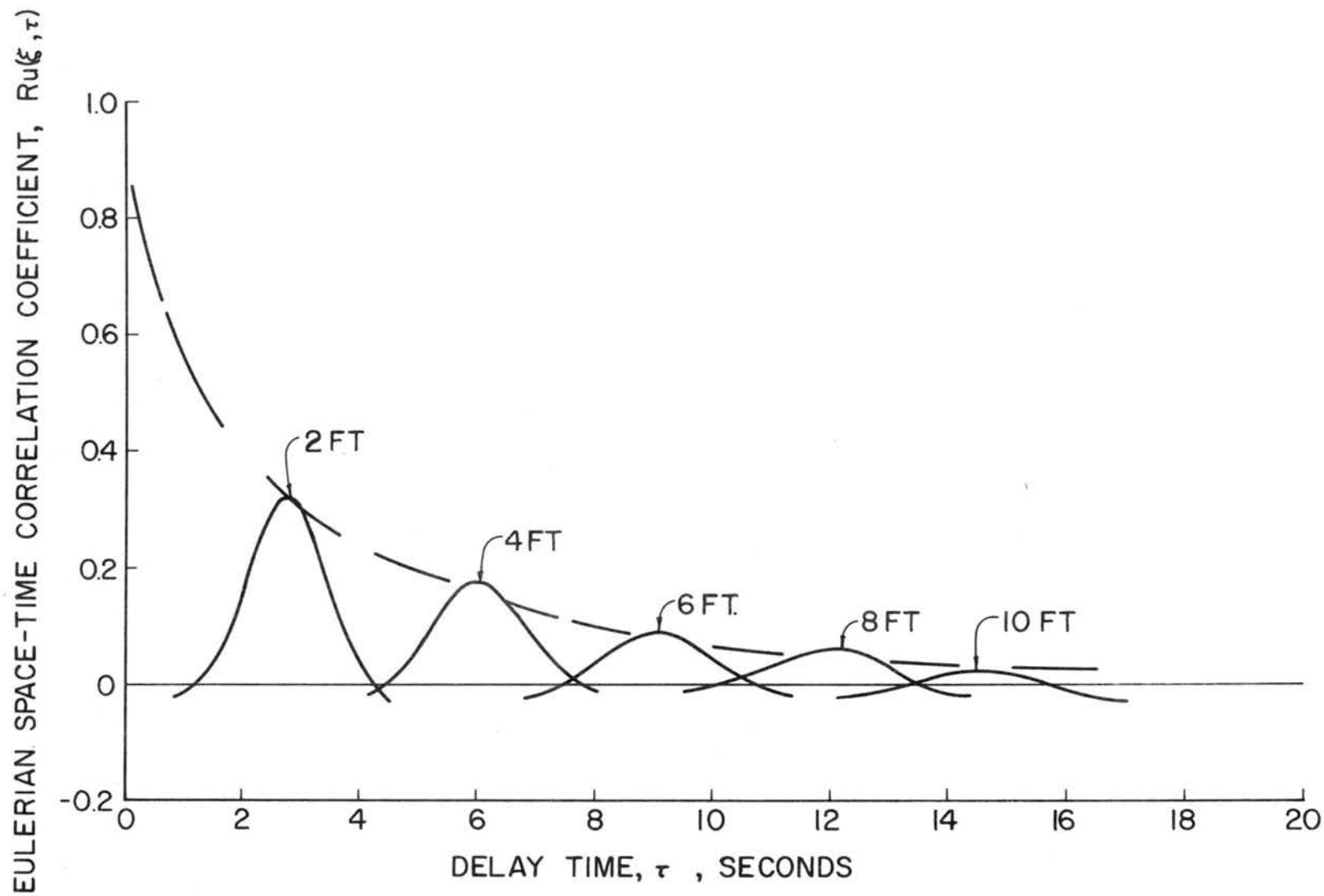


Figure 29.--Longitudinal space-time correlation distributions.

Figure 30 represents space correlation distributions in the lateral direction over the three boundary roughnesses at 0.45 foot below the water surface.

Fig. 30 -- Follows near here

Figure 31 represents space correlation distributions in the vertical direction over the three boundary roughnesses.

Fig. 31 -- Follows near here

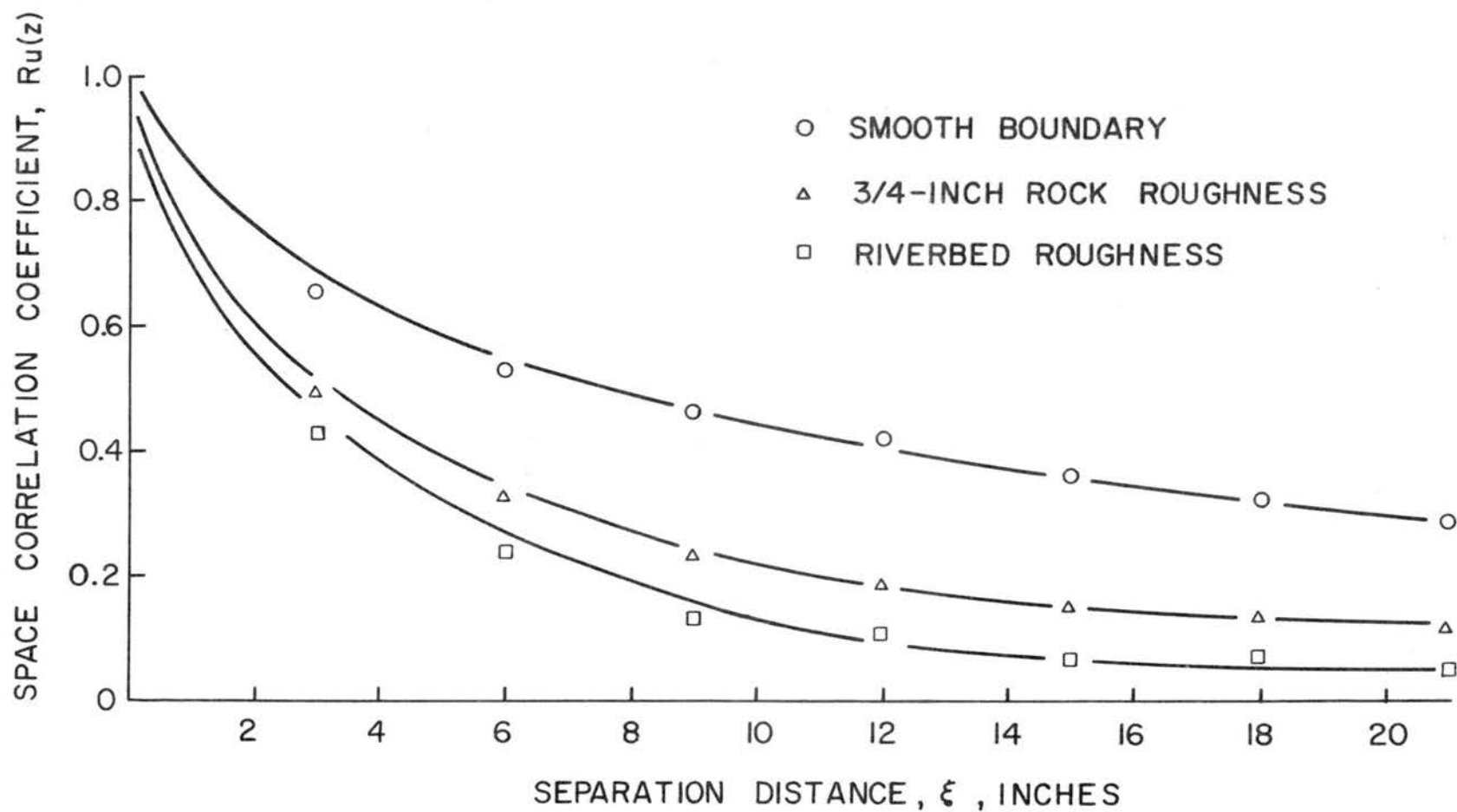


Figure 30.--Lateral space correlation distributions.

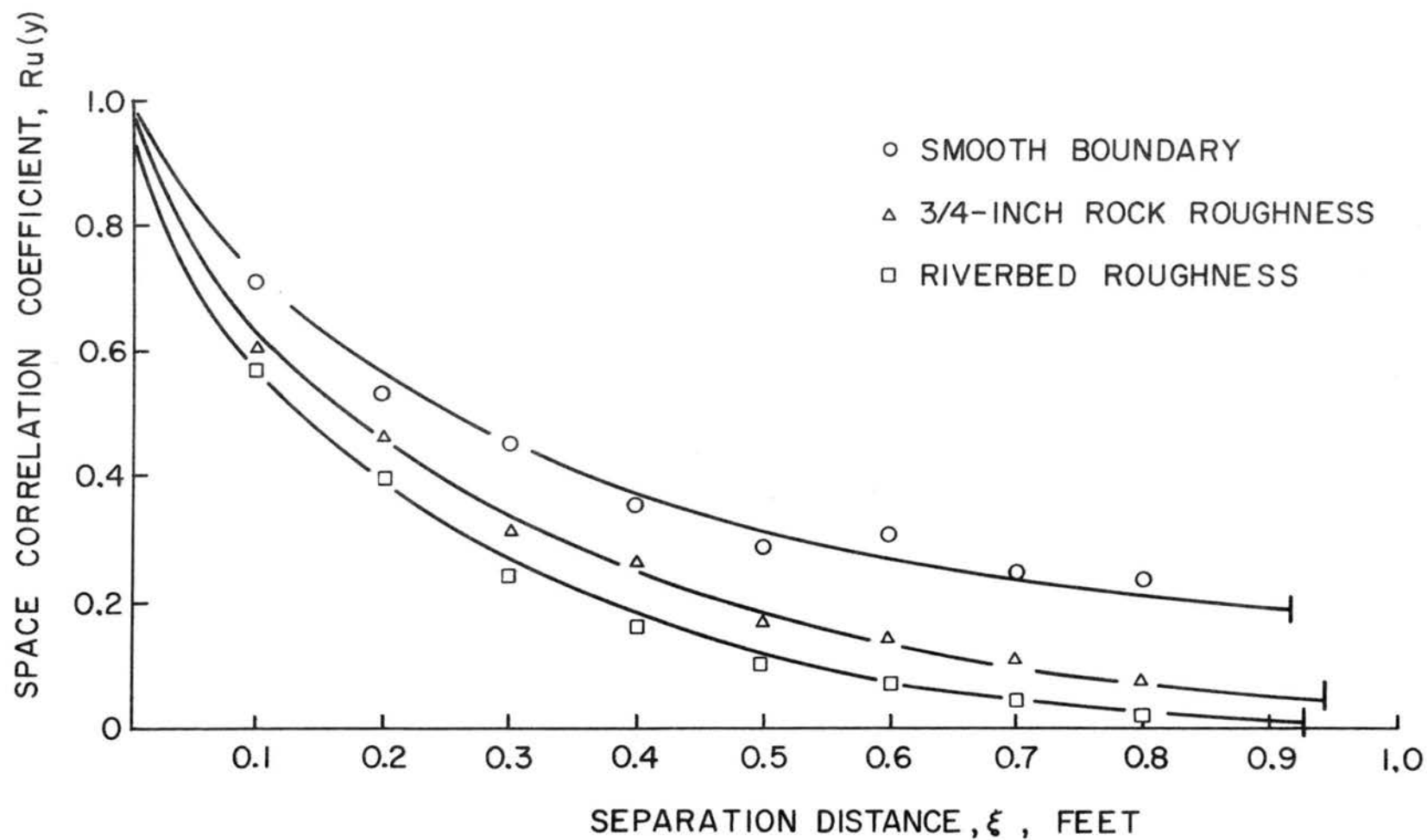


Figure 31.--Vertical space correlation distributions.

SUMMARY

This report summarizes a cooperative study between the U.S. Geological Survey and the Environmental Protection Agency aimed at measurement of turbulent transport properties of heated and salt solution jets in open-channel flow. The data reported include turbulence characteristics, longitudinal dispersion, and vertical and lateral turbulent diffusion measurements. Three different boundary roughnesses were used in the investigation.

The turbulence data include the intensity of turbulence, Eulerian time scales, autocorrelation function distributions, space correlation distributions in the vertical and horizontal directions and space-time correlation function distributions in the longitudinal direction.

Vertical and lateral concentration and temperature distributions are reported for jets of three diameters at four different jet strengths.

The basic data are presented with a minimum amount of data analysis performed so other investigators can apply their interpretation to the results.

A report will follow by the writers which presents their interpretation of the results.

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TABLE 1 - MEAN HYDRAULIC PARAMETERS

BOUNDARY CONDITION	AVERAGE DEPTH	SLOPE	WATER DISCHARGE	SHEAR VELOCITY	BOUNDARY SHEAR STRESS	KINEMATIC VISCOSITY	TEMPERATURE	REYNOLDS NUMBER	FROUDE NUMBER	CHEZY DISCHARGE COEFFICIENT
	D (FT)	$S \times 10^3$	Q (FT ³ /SEC)	U_* (FT/SEC)	τ_o (LBS/FT ²)	$\nu \times 10^5$ (FT ² /SEC)	(°CENTIGRADE)	$Re \times 10^{-4}$	F	C/\sqrt{g}
SMOOTH	0.915	0.119	3.672	0.0616	0.0046	1.62	5.20	5.851	0.191	16.8
3/4-INCH ROCK	0.933	0.324	3.071	0.0803	0.0125	1.72	2.70	4.605	0.155	10.6
RIVERBED	0.945	0.443	3.205	0.0938	0.0170	1.73	2.65	4.779	0.159	9.3

TABLE 2 - DISPERSION COEFFICIENTS

BOUNDARY CONDITION	DISPERSION COEFFICIENTS, Dx (FT ² /SEC)		
	FIRST	SECOND	AVERAGE
SMOOTH	0.213	0.239	0.226
3/4-INCH ROCK	0.543	0.499	0.521
RIVERBED	0.783	0.931	0.877

TABLE 3 - TURBULENCE CHARACTERISTICS AND VELOCITY PROFILES

Turbulence Parameters, Smooth Boundary						
Channel Centerline						
RELATIVE DEPTH	LOCAL MEAN VELOCITY	ABSOLUTE TURBULENCE INTENSITY	RELATIVE TURBULENCE INTENSITY		EULERIAN TIME SCALE	MACROSCALE
$\frac{y}{D}$	\bar{U}	$\sqrt{\overline{u^2}}$	$\frac{\sqrt{\overline{u^2}}}{U}$	$\frac{\sqrt{\overline{u^2}}}{U_*}$	T_E	L_X
	(FT/SEC)	(FT/SEC)			(SECS)	(FT)
0.963	1.096	.027	0.025	0.61	2.342	2.566
.908	1.090	.024	.022	.54	1.566	1.706
.854	1.091	.023	.021	.52	1.403	1.532
.799	1.102	.022	.020	.50	1.432	1.578
.744	1.110	.023	.021	.52	2.043	2.267
.690	1.110	.024	.022	.54	1.343	1.920
.635	1.108	.026	.023	.59	1.422	1.575
.580	1.095	.029	.026	.68	1.516	1.660
.526	1.077	.033	.031	.75	1.995	2.148
.471	1.055	.037	.035	.84	1.620	1.709
.416	1.001	.040	.040	.91	1.581	1.582
.362	.970	.044	.045	1.00	2.724	2.642
.307	.938	.046	.049	1.04	1.504	1.410
.252	.207	.053	.059	1.21	2.407	2.326
.198	.879	.057	.065	1.30	1.353	1.628
.143	.845	.061	.072	1.38	1.575	1.565
.089	.797	.069	.087	1.57	1.543	1.265
.034	.700	.088	.125	2.00	2.064	1.444
.025	.647	.099	.153	2.25	1.525	0.986
.017	.645	.119	.170	2.50	1.002	0.616

TABLE 3 - continued

Turbulence Parameters, Smooth Boundary						
1/2 Way Between a Channel Centerline and Wall						
RELATIVE DEPTH	LOCAL MEAN VELOCITY	ABSOLUTE TURBULENCE INTENSITY	RELATIVE TURBULENCE INTENSITY		EULERIAN TIME SCALE	MACROSCALE
$\frac{Y}{D}$	\bar{U}	$\sqrt{u^2}$	$\frac{\sqrt{u^2}}{U}$	$\frac{\sqrt{u^2}}{U_*}$	T_E	L_X
	(FT/SEC)	(FT/SEC)			(SECS)	(FT)
0.963	1.007	0.026	0.026	0.592	1.335	1.344
.908	1.012	.026	.026	.592	1.431	1.448
.854	1.042	.026	.025	.563	1.433	1.493
.799	1.077	.025	.023	.524	1.459	1.561
.744	1.105	.023	.021	.477	1.523	1.682
.690	1.110	.025	.023	.524	1.355	1.504
.635	1.107	.027	.025	.568	1.333	1.475
.580	1.094	.029	.026	.592	1.426	1.560
.526	1.075	.032	.030	.683	1.283	1.379
.471	1.046	.034	.033	.749	1.640	1.715
.416	1.001	.037	.037	.843	2.334	2.339
.362	.970	.039	.040	.910	1.351	1.310
.307	.933	.046	.049	1.045	1.504	1.410
.252	.908	.054	.061	1.228	1.412	1.282
.198	.880	.063	.072	1.436	1.821	1.602
.143	.846	.067	.079	1.522	1.492	1.269
.089	.797	.071	.089	1.612	2.133	1.700
.034	.742	.083	.119	1.886	1.324	.926
.027	.671	.096	.143	2.181	1.244	.836
.016	.610	.105	.172	2.386	1.241	.732
.009	.541	.123	.228	2.800	.943	.510

TABLE 3 - continued

Turbulence Parameters, 3/4-inch Rock Boundary						
Channel Centerline						
RELATIVE DEPTH	LOCAL MEAN VELOCITY	ABSOLUTE TURBULENCE INTENSITY	RELATIVE TURBULENCE INTENSITY		EULERIAN TIME SCALE	MACROSCALE
$\frac{Y}{D}$	\bar{U}	$\sqrt{u^2}$	$\frac{\sqrt{u^2}}{U}$	$\frac{\sqrt{u^2}}{U_*}$	T_E	L_X
	(FT/SEC)	(FT/SEC)			(SECS)	(FT)
0.943	1.132	0.048	0.042	0.598	0.824	0.932
.890	1.123	.051	.045	.630	1.214	1.363
.836	1.120	.051	.046	.620	.747	.836
.782	1.124	.054	.048	.667	.690	.775
.729	1.126	.057	.051	.704	.716	.806
.675	1.124	.061	.054	.754	1.349	1.516
.622	1.120	.062	.055	.767	.647	.724
.588	1.120	.064	.057	.781	.821	.919
.514	1.101	.067	.061	.828	.769	.846
.461	1.067	.072	.068	.888	.763	.814
.407	1.012	.073	.072	.903	.656	.669
.354	.954	.077	.081	1.000	1.095	1.044
.309	.900	.088	.092	1.025	.634	.588
.247	.847	.085	.100	1.050	.765	.647
.193	.785	.089	.113	1.098	.896	.546
.139	.695	.097	.140	1.198	1.061	.716
.086	.570	.119	.209	1.470	.679	.387
.032	.340	.136	.400	1.679	.445	.153

TABLE 3 - continued

Turbulence Parameters, 3/4-inch Rock Boundary

1/2 Way Between Channel Centerline and Wall

RELATIVE DEPTH	LOCAL MEAN VELOCITY	ABSOLUTE TURBULENCE INTENSITY	RELATIVE TURBULENCE INTENSITY		EULERIAN TIME SCALE	MACROSCALE
$\frac{Y}{D}$	\bar{U}	$\sqrt{u^2}$	$\frac{\sqrt{u^2}}{U}$	$\frac{\sqrt{u^2}}{U_*}$	T_E	L_X
	(FT/SEC)	(FT/SEC)			(SECS)	(FT)
0.943	0.867	0.043	0.050	0.531	1.255	1.083
.890	.870	.045	.052	.554	.835	.796
.836	.879	.047	.053	.581	.629	.525
.782	.886	.051	.058	.620	.783	.693
.728	.889	.054	.061	.667	.665	.591
.675	.889	.055	.062	.679	.734	.652
.622	.880	.058	.066	.716	.755	.664
.508	.865	.062	.072	.765	1.349	1.166
.514	.842	.065	.071	.803	.813	.686
.461	.829	.071	.086	.876	.498	.412
.407	.827	.068	.087	.840	.949	.784
.354	.838	.074	.088	.913	.766	.641
.300	.842	.077	.092	.951	.913	.768
.274	.830	.082	.099	1.012	.831	.688
.193	.719	.086	.119	1.061	.841	.585
.139	.661	.094	.142	1.160	1.042	.688
.086	.567	.111	.195	1.370	.644	.365
.032	.334	.129	.385	1.592	.473	.157

TABLE 3 - continued

Turbulence Parameters, Riverbed Boundary						
Channel Centerline						
RELATIVE DEPTH	LOCAL MEAN VELOCITY	ABSOLUTE TURBULENCE INTENSITY	RELATIVE TURBULENCE INTENSITY		EULERIAN TIME SCALE	MACROSCALE
$\frac{Y}{D}$	\bar{U}	$\sqrt{u^2}$	$\frac{\sqrt{u^2}}{U}$	$\frac{\sqrt{u^2}}{U_*}$	T_E	L_X
	(FT/SEC)	(FT/SEC)			(SECS)	(FT)
0.934	1.219	0.089	0.073	0.851	0.833	1.015
.885	1.210	.090	.074	.862	.942	1.139
.835	1.200	.091	.076	.872	.922	1.106
.785	1.190	.093	.078	.890	.734	.873
.736	1.172	.094	.080	.900	.692	.811
.686	1.155	.096	.083	.918	.742	.857
.636	1.130	.099	.088	.947	.739	.835
.586	1.100	.102	.093	.976	.889	.977
.537	1.066	.105	.098	1.004	.610	.650
.487	1.022	.107	.104	1.025	.689	.704
.437	1.012	.110	.109	1.053	.633	.640
.388	.919	.113	.123	1.031	1.080	.992
.338	.851	.118	.139	1.129	.801	.681
.288	.798	.127	.159	1.215	.676	.539
.239	.730	.133	.182	1.273	.614	.448
.189	.649	.139	.214	1.330	.854	.554
.139	.548	.152	.277	1.456	1.016	.556
.089	.410	.173	.423	1.654	.861	.353
.040	.282	.197	.700	1.884	0.420	.118

TABLE 3 - continued

Turbulence Parameters, Riverbed Boundary 1/2 Way Between a Channel Centerline and Wall						
RELATIVE DEPTH	LOCAL MEAN VELOCITY	ABSOLUTE TURBULENCE INTENSITY	RELATIVE TURBULENCE INTENSITY		EULERIAN TIME SCALE	MACROSCALE
$\frac{Y}{D}$	\bar{U}	$\sqrt{\overline{u'^2}}$	$\sqrt{\overline{u'^2}}$	$\frac{\sqrt{\overline{u'^2}}}{U_*}$	T_E	L_X
	(FT/SEC)	(FT/SEC)			(SECS)	(FT)
0.947	1.049	0.089	0.084	0.851	0.861	0.903
.894	1.049	.086	.081	.823	.816	.855
.841	1.065	.087	.081	.832	.737	.784
.783	1.095	.090	.082	.861	1.348	1.476
.735	1.115	.093	.083	.890	.837	.933
.683	1.099	.097	.083	.928	1.291	1.418
.598	1.072	.101	.094	.965	.913	.978
.545	1.071	.107	.099	1.024	.763	.817
.492	1.028	.106	.103	1.013	.671	.689
.439	.977	.113	.115	1.081	.693	.677
.386	.914	.116	.118	1.110	.814	.743
.333	.843	.121	.143	1.158	.843	.710
.280	.488	.129	.163	1.236	.613	.483
.228	.714	.134	.187	1.282	.734	.524
.175	.621	.141	.227	1.350	.947	.588
.122	.502	.156	.310	1.493	.614	.308
.069	.362	.181	.500	1.731	.812	.293
.016	.168	.233	1.386	2.228	.737	.123

TABLE 4 - DIFFUSION DATA - SMOOTH BOUNDARY - HEAT

TEMPERATURE DISTRIBUTIONS
INJECTION TEMPERATURE = 23.9 DEGREES CENTIGRADE

VARIANCE A USES BASIC DEFINITION
VARIANCE B USES REFLECTION PRINCIPLE

TABLE 4 - continued

SMALL NOZZLE DIAMETER = .468CM															
JET STRENGTH = 1.11								FROUDE NO. = 29.00							
STATION 1.00				STATION 1.50				STATION 2.00				STATION 2.50			
VERTICAL	DT	HORIZ	Y/D=0.52	VERTICAL	DT	HORIZ	Y/D=0.52	VERTICAL	DT	HORIZ	Y/D=0.00	VERTICAL	DT	HORIZ	Y/D=0.00
.631	0.000	.043	0.000	.609	0.000	.054	0.000	.646	0.000	0.000	0.000	.696	0.000	0.000	0.000
.609	.005	.032	.004	.587	.029	.043	.007	.674	.009	0.000	0.000	.674	.004	0.000	0.000
.587	.009	.022	.025	.565	.123	.037	.036	.652	.031	0.000	0.000	.652	.016	0.000	0.000
.565	.053	.011	.132	.543	.179	.027	.077	.631	.040	0.000	0.000	.631	.025	0.000	0.000
.543	.188	0.000	.224	.521	.194	.011	.117	.609	.076	0.000	0.000	.609	.029	0.000	0.000
.521	.321	-.011	.321	.499	.151	0.000	.194	.587	.077	0.000	0.000	.587	.057	0.000	0.000
.499	.206	-.022	.176	.478	.053	-.011	.156	.565	.083	0.000	0.000	.565	.060	0.000	0.000
.478	.069	-.032	.085	.456	.021	-.022	.103	.543	.089	0.000	0.000	.543	.089	0.000	0.000
.456	.022	-.043	.015	.434	.007	-.032	.061	.521	.130	0.000	0.000	.521	.078	0.000	0.000
.434	.008	-.054	.001	.412	.000	-.043	.033	.499	.107	0.000	0.000	.499	.079	0.000	0.000
.412	.001	-.065	0.000	.399	0.000	-.054	0.000	.478	.073	0.000	0.000	.478	.060	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.456	.064	0.000	0.000	.456	.027	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.434	.038	0.000	0.000	.434	.017	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.412	.022	0.000	0.000	.412	.009	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.399	.007	0.000	0.000	.399	.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.368	.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.346	.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.440394	1.944252	.433736	1.943888	.424443	0.000000	.425467	0.000000	.425467	0.000000	.425467	0.000000	.425467	0.000000	.425467	0.000000
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.000626	.000753	.000424	.001315	.003411	.000000	.002578	.000000	.002578	.000000	.002578	.000000	.002578	.000000	.002578	.000000
VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B
.000479	.000650	.000941	.001154	.002930	.000000	.002436	.000000	.002436	.000000	.002436	.000000	.002436	.000000	.002436	.000000
AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T
.0801	.0895	.0692	.0736	.0510	0.0000	.0367	0.0000	.0367	0.0000	.0367	0.0000	.0367	0.0000	.0367	0.0000

SMALL NOZZLE DIAMETER = .468CM															
JET STRENGTH = 1.11								FROUDE NO. = 29.00							
STATION 3.00				STATION 0.00				STATION 0.00				STATION 0.00			
VERTICAL	DT	HORIZ	Y/D=0.00	VERTICAL	DT	HORIZ	Y/D=0.00	VERTICAL	DT	HORIZ	Y/D=0.00	VERTICAL	DT	HORIZ	Y/D=0.00
.718	0.000	0.000	0.000	.762	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.696	.004	0.000	0.000	.740	.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.674	.016	0.000	0.000	.718	.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.652	.026	0.000	0.000	.696	.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.631	.034	0.000	0.000	.674	.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.609	.033	0.000	0.000	.652	.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.587	.052	0.000	0.000	.631	.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.565	.053	0.000	0.000	.609	.027	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.543	.063	0.000	0.000	.587	.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.521	.067	0.000	0.000	.565	.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.499	.056	0.000	0.000	.543	.036	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.478	.067	0.000	0.000	.521	.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.456	.061	0.000	0.000	.499	.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.434	.031	0.000	0.000	.478	.043	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.412	.025	0.000	0.000	.456	.041	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.399	.013	0.000	0.000	.434	.037	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.368	.006	0.000	0.000	.412	.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.346	.003	0.000	0.000	.399	.024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.325	.000	0.000	0.000	.368	.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.346	.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.325	.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.303	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.281	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.428516	0.000000	.441233	0.000000	.400000	0.000000	.400000	0.000000	.400000	0.000000	.400000	0.000000	.400000	0.000000	.400000	0.000000
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.000000	0.000000	.000000	0.000000	.000000	0.000000	.000000	0.000000	.000000	0.000000	.000000	0.000000	.000000	0.000000	.000000	0.000000
VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B
.000000	0.000000	.000000	0.000000	.000000	0.000000	.000000	0.000000	.000000	0.000000	.000000	0.000000	.000000	0.000000	.000000	0.000000
AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T
.0100	0.0000	.0212	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

TABLE 4 - continued

SMALL NOZZLE DIAMETER = .464CM															
JET STRENGTH = 2.56				FROUDE NO. = 70.00											
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	HORIZ	Y/D = .54		VERTICAL	HORIZ	Y/D = .54		VERTICAL	HORIZ	Y/D = .54		VERTICAL	HORIZ	Y/D = .55	
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.652	0.000	.075	0.000	.827	0.000	.097	0.000	.842	0.000	.129	0.000	.862	0.000	.172	0.000
.631	.025	.065	.006	.805	.013	.086	.004	.827	.007	.118	.005	.827	.003	.151	.009
.609	.086	.054	.014	.784	.032	.075	.009	.773	.025	.108	.007	.773	.004	.129	.014
.587	.127	.043	.024	.762	.066	.065	.026	.718	.040	.097	.008	.718	.016	.104	.024
.565	.231	.032	.041	.740	.103	.054	.035	.663	.057	.086	.012	.663	.036	.086	.025
.543	.363	.022	.085	.718	.118	.043	.049	.609	.102	.075	.016	.609	.061	.065	.069
.521	.323	.011	.229	.696	.150	.032	.074	.554	.117	.065	.010	.554	.081	.043	.064
.499	.238	0.000	.343	.674	.121	.022	.095	.499	.129	.054	.032	.499	.090	.022	.071
.478	.182	-.011	.298	.652	.175	.011	.131	.445	.097	.043	.049	.445	.079	0.000	.090
.456	.086	-.022	.209	.631	.166	0.000	.184	.390	.070	.032	.059	.390	.065	-.022	.078
.434	.033	-.032	.122	.609	.189	-.011	.155	.336	.035	.022	.071	.336	.048	-.043	.066
.412	.010	-.043	.068	.587	.157	-.022	.146	.281	.019	.011	.109	.281	.038	-.065	.048
.390	0.000	-.054	.025	.565	.129	-.032	.116	.226	.005	0.000	.129	.226	.025	-.086	.038
.000	0.000	-.065	.008	.543	.098	-.043	.080	.172	.001	-.011	.115	.172	.012	-.108	.027
.000	0.000	-.075	.001	.521	.064	-.054	.040	0.000	0.000	-.022	.100	.117	.007	-.129	.018
.000	0.000	0.000	0.000	.499	.038	-.065	.022	0.000	0.000	-.032	.081	.062	.000	-.151	.010
.000	0.000	0.000	0.000	.478	.020	-.075	.010	0.000	0.000	-.043	.061	0.000	0.000	-.172	.003
.000	0.000	0.000	0.000	.456	.009	-.086	.004	0.000	0.000	-.054	.052	0.000	0.000	-.194	.001
.000	0.000	0.000	0.000	.434	.001	-.097	.001	0.000	0.000	-.065	.035	0.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.412	0.000	0.000	0.000	0.000	0.000	-.075	.016	0.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.390	0.000	0.000	0.000	0.000	0.000	-.086	.012	0.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.368	0.000	0.000	0.000	0.000	0.000	-.097	.010	0.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.346	0.000	0.000	0.000	0.000	0.000	-.108	.008	0.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.324	0.000	0.000	0.000	0.000	0.000	-.118	.002	0.000	0.000	0.000	0.000
MEAN	MEAN			MEAN	MEAN			MEAN	MEAN			MEAN	MEAN		
.430671	1.948977			.332813	1.944175			.431713	1.946180			.485487	1.942429		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.001589	.001689			.004565	.003647			.012372	.006220			.016933	.016864		
VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B		
.001532	.001273			.004734	.002726			.011822	.004129			.015903	.014611		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.1294	.0982			.0858	.0625			.0502	.0416			.0356	.0364		

SMALL NOZZLE DIAMETER = .464CM															
JET STRENGTH = 2.56				FROUDE NO. = 70.00											
STATION 5.00				STATION 6.00				STATION 7.00				STATION 8.00			
VERTICAL	HORIZ	Y/D = .55		VERTICAL	HORIZ	Y/D = .55		VERTICAL	HORIZ	Y/D = .55		VERTICAL	HORIZ	Y/D = .55	
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.827	0.000	.258	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.827	.002	.237	.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.773	.010	.215	.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.718	.021	.194	.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.663	.025	.172	.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.609	.035	.151	.034	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.554	.042	.129	.041	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.499	.046	.108	.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.445	.062	.086	.054	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.390	.069	.065	.058	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.336	.083	.043	.062	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.281	.086	.022	.054	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.226	.027	0.000	.058	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.172	.012	-.022	.059	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.117	.007	-.043	.044	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.062	.002	-.065	.033	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.008	.000	-.086	.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.108	.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.129	.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.151	.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.172	.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN			MEAN	MEAN			MEAN	MEAN			MEAN	MEAN		
.504477	1.854308			0.000000	0.000000			0.000000	0.000000			0.000000	0.000000		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.021302	.027193			0.000000	0.000000			0.000000	0.000000			0.000000	0.000000		
VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B		
.018231	.020287			0.000000	0.000000			0.000000	0.000000			0.000000	0.000000		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.0247	.0309			0.0000	0.0000			0.0000	0.0000			0.0000	0.0000		

TABLE 4 - continued

SMALL NOZZLE DIAMETER = .468CM															
JET STRENGTH = 4.34				FROUDE NO. = 118.00				STATION 2.00				STATION 3.00			
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.674	0.000	.129	0.000	.718	0.000	.129	0.000	.784	0.000	.172	0.000	.882	0.000	.172	0.000
.652	.005	.118	.003	.696	.006	.118	.004	.762	.007	.151	.005	.827	.019	.151	.008
.631	.015	.108	.006	.674	.016	.108	.011	.740	.030	.129	.013	.773	.035	.129	.019
.609	.134	.097	.026	.652	.044	.097	.018	.718	.049	.108	.029	.718	.047	.108	.030
.587	.246	.086	.180	.631	.070	.086	.026	.696	.055	.086	.060	.663	.068	.086	.038
.565	.352	.075	.219	.609	.160	.075	.038	.674	.057	.065	.126	.609	.101	.065	.068
.543	.464	.065	.267	.587	.249	.065	.038	.652	.076	.043	.113	.554	.139	.043	.071
.521	.540	.054	.345	.565	.262	.054	.045	.631	.087	.022	.182	.499	.146	.022	.146
.499	.645	.043	.443	.543	.290	.043	.118	.609	.100	0.000	.203	.445	.129	0.000	.128
.478	.745	.032	.547	.521	.266	.032	.206	.587	.136	-.022	.165	.390	.106	-.022	.045
.456	.818	.022	.603	.499	.281	.022	.263	.565	.155	-.043	.140	.336	.077	-.043	.109
.434	.903	.011	.677	.478	.253	.011	.287	.543	.163	-.065	.121	.281	.060	-.065	.060
.412	.985	0.000	.719	.456	.200	0.000	.290	.521	.163	-.086	.089	.226	.026	-.086	.039
.390	1.061	-.011	.674	.434	.167	-.011	.242	.499	.193	-.108	.054	.172	.008	-.108	.017
0.000	0.000	-.022	.631	.412	.134	-.022	.260	.478	.201	-.129	.019	.117	.002	-.129	.008
0.000	0.000	-.032	.609	.390	.105	-.032	.208	.456	.195	-.151	.012	.062	0.000	-.151	.004
0.000	0.000	-.043	.609	.368	.058	-.043	.111	.434	.194	-.172	.002	0.000	0.000	-.172	0.000
0.000	0.000	0.000	0.000	.346	.043	-.054	.078	.412	.203	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.325	.024	-.065	.044	.390	.178	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.303	.012	-.075	.025	.368	.163	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.281	.002	-.086	.010	.346	.158	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.097	.008	.325	.133	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.108	.005	.303	.103	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.118	.005	.281	.086	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.129	.002	.259	.082	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.237	.075	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.215	.057	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.193	.037	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.172	.015	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.150	.009	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.128	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.475269	1.856235			.449303	1.935595			.497989	1.949120			.451713	1.929838		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.001747	.002793			.004790	.004904			.014093	.013133			.017372	.012558		
VARIANCE R	VARIANCE R			VARIANCE R	VARIANCE R			VARIANCE B	VARIANCE B			VARIANCE H	VARIANCE R		
.001941	.002430			.005281	.004497			.015415	.011900			.017300	.009150		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.2130	.1909			.1258	.0936			.1019	.0784			.0602	.0494		

SMALL NOZZLE DIAMETER = .468CM															
JET STRENGTH = 4.34				FROUDE NO. = 118.00				STATION 0.00				STATION 0.00			
STATION 5.00				STATION 0.00				STATION 0.00				STATION 0.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.937	0.000	.215	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.882	.004	.194	.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.827	.021	.172	.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.773	.037	.151	.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.718	.052	.129	.033	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.663	.079	.108	.062	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.609	.076	.086	.066	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.554	.094	.065	.078	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.499	.095	.043	.088	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.445	.105	.022	.101	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.390	.093	0.000	.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.336	.084	-.022	.105	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.281	.085	-.043	.091	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.226	.072	-.065	.064	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.172	.059	-.086	.042	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.117	.048	-.108	.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.062	.033	-.129	.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.008	.022	-.151	.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.172	.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.194	.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.215	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.522154	1.901066			0.000000	0.000000			0.000000	0.000000			0.000000	0.000000		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.075082	.027557			0.000000	0.000000			0.000000	0.000000			0.000000	0.000000		
VARIANCE H	VARIANCE H			VARIANCE H	VARIANCE H			VARIANCE R	VARIANCE R			VARIANCE H	VARIANCE H		
.075013	.022454			0.000000	0.000000			0.000000	0.000000			0.000000	0.000000		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.0588	.0455			0.0000	0.0000			0.0000	0.0000			0.0000	0.0000		

TABLE 4 - continued

SMALL NOZZLE DIAMETER = .468CM															
JET STRENGTH = 7.15				FROUDE NO. = 196.00				STATION 1.00				STATION 2.00			
STATION 1.00		STATION 2.00		STATION 1.00		STATION 2.00		STATION 1.00		STATION 2.00		STATION 1.00		STATION 2.00	
VERTICAL	HORIZ	VERTICAL	HORIZ	VERTICAL	HORIZ	VERTICAL	HORIZ	VERTICAL	HORIZ	VERTICAL	HORIZ	VERTICAL	HORIZ	VERTICAL	HORIZ
Y/D	Z/HW	Y/D	Z/HW	Y/D	Z/HW	Y/D	Z/HW	Y/D	Z/HW	Y/D	Z/HW	Y/D	Z/HW	Y/D	Z/HW
.762	0.000	.086	0.000	.784	0.000	.129	0.000	.784	0.000	.172	0.000	.784	0.000	.215	0.000
.760	.012	.075	.004	.762	.026	.118	.028	.762	.013	.151	.011	.762	.005	.194	.011
.718	.047	.065	.024	.740	.058	.108	.045	.740	.021	.129	.097	.740	.039	.172	.021
.696	.077	.054	.180	.714	.094	.097	.071	.718	.046	.108	.174	.718	.018	.151	.065
.674	.092	.043	.182	.696	.122	.086	.092	.696	.087	.086	.215	.696	.065	.129	.104
.652	.113	.032	.567	.674	.100	.075	.141	.674	.094	.065	.225	.674	.089	.108	.095
.631	.174	.022	.865	.652	.194	.065	.247	.652	.149	.043	.279	.652	.136	.086	.163
.609	.320	.011	.888	.631	.221	.054	.339	.631	.209	.022	.284	.631	.167	.065	.182
.587	.451	0.000	.886	.609	.244	.043	.401	.609	.254	0.000	.304	.609	.186	.043	.190
.565	.627	-.011	.884	.587	.288	.032	.438	.587	.260	-.022	.263	.587	.163	.022	.198
.543	.743	-.022	.725	.565	.414	.022	.414	.565	.258	-.043	.270	.565	.181	0.000	.220
.521	.888	-.032	.559	.543	.431	.011	.393	.543	.301	-.065	.229	.543	.179	-.022	.183
.499	.671	-.043	.390	.521	.431	0.000	.395	.521	.304	-.086	.203	.521	.214	-.043	.182
.478	.575	-.054	.187	.499	.438	-.011	.363	.499	.258	-.108	.170	.499	.196	-.065	.124
.456	.480	-.065	.037	.478	.432	-.022	.300	.478	.281	-.129	.098	.478	.220	-.086	.146
.434	.373	-.075	.012	.456	.418	-.032	.240	.456	.237	-.151	.043	.456	.208	-.108	.106
.412	.174	-.086	.001	.434	.400	-.043	.175	.434	.222	-.172	.014	.434	.197	-.129	.079
.390	.069	-.097	0.000	.412	.308	-.054	.136	.412	.177	-.194	.001	.412	.149	-.151	.047
.368	.037	0.000	0.000	.390	.216	-.065	.064	.390	.160	0.000	0.000	.390	.160	-.172	.024
.346	.014	0.000	0.000	.368	.147	-.075	.038	.368	.123	0.000	0.000	.368	.124	-.194	0.000
.325	.002	0.000	0.000	.346	.080	-.086	.047	.346	.092	0.000	0.000	.346	.106	-.215	0.000
0.000	0.000	0.000	0.000	.325	.046	-.097	.031	.325	.071	0.000	0.000	.325	.093	0.000	0.000
0.000	0.000	0.000	0.000	.303	.019	-.108	.015	.303	.054	0.000	0.000	.303	.065	0.000	0.000
0.000	0.000	0.000	0.000	.281	.002	-.118	.002	.281	.029	0.000	0.000	.281	.043	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.259	.015	0.000	0.000	.259	.025	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.237	.003	0.000	0.000	.237	.012	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.215	.004	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.193	.002	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.472477	1.937214			.441283	1.909648			.442761	1.941142			.456261	1.926386		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.003909	.002831			.007432	.006838			.008828	.019744			.010612	.024555		
VARIANCE R	VARIANCE R			VARIANCE R	VARIANCE R			VARIANCE R	VARIANCE R			VARIANCE R	VARIANCE R		
.002818	.003781			.008555	.007013			.009535	.024818			.012181	.026132		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.2814	.3650			.2116	.1839			.1431	.1601			.1087	.1019		

SMALL NOZZLE DIAMETER = .468CM															
JET STRENGTH = 7.15				FROUDE NO. = 196.00				STATION 5.00				STATION 0.00			
STATION 5.00		STATION 0.00		STATION 5.00		STATION 0.00		STATION 5.00		STATION 0.00		STATION 5.00		STATION 0.00	
VERTICAL	HORIZ	VERTICAL	HORIZ	VERTICAL	HORIZ	VERTICAL	HORIZ	VERTICAL	HORIZ	VERTICAL	HORIZ	VERTICAL	HORIZ	VERTICAL	HORIZ
Y/D	Z/HW	Y/D	Z/HW	Y/D	Z/HW	Y/D	Z/HW	Y/D	Z/HW	Y/D	Z/HW	Y/D	Z/HW	Y/D	Z/HW
.937	0.000	.258	0.000	.937	0.000	.258	0.000	.937	0.000	.258	0.000	.937	0.000	.258	0.000
.882	.010	.237	.007	.882	.010	.237	.007	.882	.010	.237	.007	.882	.010	.237	.007
.827	.033	.215	.023	.827	.033	.215	.023	.827	.033	.215	.023	.827	.033	.215	.023
.771	.053	.194	.037	.771	.053	.194	.037	.771	.053	.194	.037	.771	.053	.194	.037
.718	.068	.172	.053	.718	.068	.172	.053	.718	.068	.172	.053	.718	.068	.172	.053
.663	.078	.151	.065	.663	.078	.151	.065	.663	.078	.151	.065	.663	.078	.151	.065
.609	.099	.129	.073	.609	.099	.129	.073	.609	.099	.129	.073	.609	.099	.129	.073
.554	.124	.108	.092	.554	.124	.108	.092	.554	.124	.108	.092	.554	.124	.108	.092
.499	.157	.086	.110	.499	.157	.086	.110	.499	.157	.086	.110	.499	.157	.086	.110
.445	.156	.065	.127	.445	.156	.065	.127	.445	.156	.065	.127	.445	.156	.065	.127
.390	.128	.043	.152	.390	.128	.043	.152	.390	.128	.043	.152	.390	.128	.043	.152
.336	.096	.022	.150	.336	.096	.022	.150	.336	.096	.022	.150	.336	.096	.022	.150
.281	.061	0.000	.157	.281	.061	0.000	.157	.281	.061	0.000	.157	.281	.061	0.000	.157
.226	.045	-.022	.138	.226	.045	-.022	.138	.226	.045	-.022	.138	.226	.045	-.022	.138
.172	.029	-.043	.116	.172	.029	-.043	.116	.172	.029	-.043	.116	.172	.029	-.043	.116
.117	.010	-.065	.100	.117	.010	-.065	.100	.117	.010	-.065	.100	.117	.010	-.065	.100
.062	.000	-.086	.078	.062	.000	-.086	.078	.062	.000	-.086	.078	.062	.000	-.086	.078
0.000	0.000	-.108	.064	0.000	0.000	-.108	.064	0.000	0.000	-.108	.064	0.000	0.000	-.108	.064
0.000	0.000	-.129	.040	0.000	0.000	-.129	.040	0.000	0.000	-.129	.040	0.000	0.000	-.129	.040
0.000	0.000	-.151	.047	0.000	0.000	-.151	.047	0.000	0.000	-.151	.047	0.000	0.000	-.151	.047
0.000	0.000	-.172	.024	0.000	0.000	-.172	.024	0.000	0.000	-.172	.024	0.000	0.000	-.172	.024
0.000	0.000	-.194	.019	0.000	0.000	-.194	.019	0.000	0.000	-.194	.019	0.000	0.000	-.194	.019
0.000	0.000	-.215	.018	0.000	0.000	-.215	.018	0.000	0.000	-.215	.018	0.000	0.000	-.215	.018
0.000	0.000	-.237	.007	0.000	0.000	-.237	.007	0.000	0.000	-.237	.007	0.000	0.000	-.237	.007
0.000	0.000	-.258	.004	0.000	0.000	-.258	.004	0.000	0.000	-.258	.004	0.000	0.000	-.258	.004
0.000	0.000	-.280	.001	0.000	0.000	-.280	.001	0.000	0.000	-.280	.001	0.000	0.000	-.280	.001
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.459873	1.910593			.459873	1.910593			.459873	1.910593			.459873	1.910593		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.022840	.034186			.022840	.034186			.022840	.034186			.022840	.034186		
VARIANCE R	VARIANCE R			VARIANCE R	VARIANCE R			VARIANCE R	VARIANCE R			VARIANCE R	VARIANCE R		
.021261	.032504			.021261	.032504			.021261	.032504			.021261	.032504		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.0675	.0655			.0675	.0655			.0675	.0655			.0675	.0655		

TABLE 4 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 1.52								FROUDE NO. = 30.80							
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.705	0.000	.129	0.000	.727	0.000	.097	0.000	.760	0.000	.140	0.000	.760	0.000	.172	0.000
.687	.019	.118	.025	.705	.013	.086	.023	.705	.005	.129	.012	.705	.003	.151	.015
.681	.054	.108	.062	.683	.024	.075	.041	.650	.063	.118	.034	.650	.059	.129	.028
.633	.072	.097	.089	.681	.028	.065	.060	.596	.110	.108	.072	.596	.102	.108	.042
.617	.075	.086	.138	.639	.026	.054	.097	.541	.239	.097	.103	.541	.170	.086	.069
.596	.093	.075	.257	.617	.075	.043	.185	.486	.344	.086	.065	.486	.290	.065	.155
.574	.150	.065	.382	.596	.127	.032	.409	.437	.360	.075	.076	.432	.274	.043	.178
.552	.306	.054	.888	.574	.215	.022	.420	.377	.252	.065	.136	.377	.209	.022	.213
.530	.647	.043	1.200	.552	.315	.011	.455	.322	.129	.054	.200	.322	.123	0.000	.290
.508	1.016	.032	1.300	.530	.630	0.000	.589	.268	.065	.043	.252	.268	.075	-.022	.233
.486	1.265	.022	1.168	.508	.644	-.011	.505	.213	.028	.032	.344	.213	.034	-.043	.243
.464	1.300	.011	.897	.486	.601	-.022	.568	.158	.009	.022	.246	.158	.012	-.065	.172
.447	.804	0.000	.677	.464	.381	-.032	.484	.104	.001	.011	.281	.104	.004	-.086	.145
.421	.496	-.011	.436	.447	.589	-.043	.315	0.000	0.000	0.000	.360	0.000	0.000	-.108	.048
.399	.212	-.022	.250	.421	.386	-.054	.204	0.000	0.000	-.011	.302	0.000	0.000	-.129	.029
.377	.068	-.032	.112	.399	.272	-.065	.126	0.000	0.000	-.022	.295	0.000	0.000	-.151	.018
.355	.035	-.043	.037	.377	.204	-.075	.062	0.000	0.000	-.032	.330	0.000	0.000	-.172	.001
.333	.024	-.054	.003	.355	.138	-.086	.008	0.000	0.000	-.043	.231	0.000	0.000	-.194	.004
.311	.001	0.000	0.000	.333	.085	0.000	0.000	0.000	0.000	-.054	.183	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.311	.051	0.000	0.000	0.000	0.000	-.065	.193	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.290	.033	0.000	0.000	0.000	0.000	-.075	.090	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.268	.010	0.000	0.000	0.000	0.000	-.086	.084	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.246	0.000	0.000	0.000	0.000	0.000	-.097	.049	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.108	.053	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.118	.021	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.129	.018	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.140	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN			MEAN	MEAN			MEAN	MEAN			MEAN	MEAN		
.470292	1.880046			.477840	1.948543			.500600	1.936232			.509431	1.951727		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.002342	.002920			.005140	.003511			.008308	.009827			.009644	.013469		
VARIANCE R	VARIANCE B			VARIANCE R	VARIANCE R			VARIANCE R	VARIANCE R			VARIANCE R	VARIANCE R		
.001654	.002564			.003378	.003953			.008102	.008652			.008671	.011494		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.3487	.4401			.1865	.2477			.1250	.1492			.1043	.1040		

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 1.52								FROUDE NO. = 30.80							
STATION 5.00				STATION 6.00				STATION 7.00				STATION 8.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.814	0.000	.215	0.000	.869	0.000	.258	0.000	.869	0.000	.258	0.000	.869	0.000	.301	0.000
.760	.019	.194	.012	.814	.010	.237	.005	.814	.008	.237	.005	.814	.005	.240	.006
.705	.043	.172	.035	.760	.032	.215	.010	.760	.023	.215	.018	.760	.028	.258	.010
.650	.073	.151	.047	.705	.055	.194	.051	.705	.057	.194	.031	.705	.054	.237	.016
.596	.157	.129	.046	.650	.099	.172	.048	.650	.087	.172	.036	.650	.063	.215	.022
.541	.161	.108	.086	.596	.143	.151	.043	.596	.112	.151	.049	.596	.101	.194	.031
.486	.240	.086	.092	.541	.199	.129	.050	.541	.138	.129	.062	.541	.114	.172	.036
.432	.206	.065	.121	.486	.158	.108	.107	.486	.164	.108	.075	.486	.126	.151	.057
.377	.177	.043	.188	.432	.139	.086	.092	.432	.139	.086	.094	.432	.140	.129	.062
.322	.122	.022	.202	.377	.114	.065	.116	.377	.136	.065	.120	.377	.134	.108	.069
.268	.094	0.000	.218	.322	.092	.043	.102	.322	.140	.043	.141	.322	.127	.086	.053
.213	.061	-.022	.240	.268	.063	.022	.156	.268	.107	.022	.164	.268	.111	.065	.090
.158	.041	-.043	.230	.213	.037	0.000	.199	.213	.087	0.000	.163	.213	.089	.043	.106
.104	.014	-.065	.173	.158	.020	-.022	.185	.158	.074	-.022	.103	.158	.071	.022	.140
.049	.002	-.086	.129	.104	.011	-.043	.151	.104	.056	-.043	.143	.104	.056	0.000	.124
0.000	0.000	-.108	.080	.049	.005	-.065	.119	.049	.038	-.065	.156	.049	.029	-.022	.136
0.000	0.000	-.129	.054	0.000	0.000	-.086	.111	0.000	0.000	-.086	.128	0.000	0.000	-.063	.104
0.000	0.000	-.151	.033	0.000	0.000	-.108	.098	0.000	0.000	-.108	.123	0.000	0.000	-.065	.067
0.000	0.000	-.172	.016	0.000	0.000	-.129	.075	0.000	0.000	-.129	.128	0.000	0.000	-.086	.059
0.000	0.000	-.194	.010	0.000	0.000	-.151	.041	0.000	0.000	-.151	.094	0.000	0.000	-.108	.051
0.000	0.000	-.215	.004	0.000	0.000	-.172	.021	0.000	0.000	-.172	.053	0.000	0.000	-.129	.042
0.000	0.000	0.000	0.000	0.000	0.000	-.194	.013	0.000	0.000	-.194	.046	0.000	0.000	-.151	.042
0.000	0.000	0.000	0.000	0.000	0.000	-.215	.007	0.000	0.000	-.215	.021	0.000	0.000	-.172	.030
0.000	0.000	0.000	0.000	0.000	0.000	-.237	.007	0.000	0.000	-.237	.016	0.000	0.000	-.194	.020
0.000	0.000	0.000	0.000	0.000	0.000	-.258	.002	0.000	0.000	-.258	0.000	0.000	0.000	-.215	.015
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.237	.011
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.258	.002
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.280	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.301	.001
MEAN	MEAN			MEAN	MEAN			MEAN	MEAN			MEAN	MEAN		
.505611	1.962083			.474090	1.935101			.530537	1.969870			.543690	1.917414		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.015163	.021865			.018350	.031157			.026130	.037776			.026238	.042064		
VARIANCE R	VARIANCE R			VARIANCE R	VARIANCE R			VARIANCE R	VARIANCE R			VARIANCE R	VARIANCE R		
.011731	.019448			.013838	.023155			.026803	.034579			.030871	.042126		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.0941	.0960			.0735	.0729			.0853	.0785			.0780	.0849		

TABLE 4 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 2.43				FROUDE NO. = 44.00				STATION 1.00				STATION 2.00			
VERTICAL	DT	HORIZ	Y/D = .49	VERTICAL	DT	HORIZ	Y/D = .49	VERTICAL	DT	HORIZ	Y/D = .49	VERTICAL	DT	HORIZ	Y/D = .49
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.617	0.000	.096	0.000	.705	0.000	.097	0.000	.814	0.000	.140	0.000	.814	0.000	.172	0.000
.594	.020	.075	.016	.683	.008	.086	.012	.760	.005	.129	.008	.760	.012	.151	.014
.576	.131	.065	.039	.661	.021	.075	.056	.705	.025	.118	.017	.705	.023	.129	.038
.552	.549	.064	.037	.639	.035	.065	.119	.650	.091	.108	.026	.650	.064	.108	.056
.530	.455	.047	.045	.617	.138	.054	.291	.596	.184	.097	.076	.596	.125	.086	.164
.508	1.317	.032	.254	.596	.171	.043	.376	.541	.367	.086	.119	.541	.246	.065	.224
.484	1.700	.022	.408	.574	.320	.032	.693	.486	.506	.075	.174	.486	.341	.043	.244
.464	1.583	.011	1.469	.552	.486	.022	.762	.432	.531	.065	.163	.432	.411	.022	.389
.443	1.277	0.000	1.700	.530	.565	.011	.828	.377	.402	.054	.388	.377	.304	0.000	.411
.421	.885	-.011	1.651	.508	.529	0.000	.852	.322	.256	.043	.385	.322	.230	-.022	.268
.399	.437	-.022	1.278	.484	.751	-.011	.719	.268	.170	.032	.480	.268	.166	-.043	.185
.377	.191	-.032	.920	.464	.852	-.022	.529	.213	.090	.022	.419	.213	.111	-.065	.115
.355	.054	-.043	.395	.443	.712	-.032	.359	.158	.050	.011	.513	.158	.059	-.086	.062
.333	.014	-.054	.194	.421	.539	-.043	.271	.104	.015	0.000	.440	.104	.027	-.108	.032
.311	.001	-.065	.107	.399	.485	-.054	.174	.049	.002	-.011	.531	.049	.003	-.129	.020
0.000	0.000	-.075	.049	.377	.353	-.065	.041	0.000	0.000	-.022	.500	0.000	0.000	-.151	.007
0.000	0.000	-.086	.001	.355	.213	-.075	.047	0.000	0.000	-.032	.389	0.000	0.000	-.172	.002
0.000	0.000	0.000	0.000	.333	.125	-.086	.013	0.000	0.000	-.043	.274	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.311	.063	-.097	0.000	0.000	0.000	-.054	.322	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.290	.033	0.000	0.000	0.000	0.000	-.065	.224	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.268	.008	0.000	0.000	0.000	0.000	-.075	.132	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.246	.008	0.000	0.000	0.000	0.000	-.086	.068	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.097	.033	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.108	.022	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.118	.004	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.129	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.480218	1.951388		.482921	1.927020		.516698	1.927023		.532688		1.914506				
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A		VARIANCE A				
.001731	.001908		.004365	.003474		.011265	.007664		.013477		.010734				
VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B		VARIANCE B				
.001798	.001918		.003605	.003602		.010236	.008484		.010600		.009141				
AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T		AVERAGE T				
.6023	.5270		.2916	.3238		.1796	.2263		.1415		.1313				

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 2.43				FROUDE NO. = 44.00				STATION 5.00				STATION 6.00			
VERTICAL	DT	HORIZ	Y/D = .43	VERTICAL	DT	HORIZ	Y/D = .43	VERTICAL	DT	HORIZ	Y/D = .43	VERTICAL	DT	HORIZ	Y/D = .43
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.869	0.000	.215	0.000	.869	0.000	.258	0.000	.869	0.000	.301	0.000	.923	0.000	.301	0.000
.814	.010	.194	.020	.814	.021	.237	.005	.814	.012	.280	.008	.869	.004	.280	.009
.760	.033	.172	.037	.760	.060	.215	.010	.760	.025	.258	.024	.814	.012	.258	.014
.705	.070	.151	.104	.705	.090	.194	.018	.705	.078	.237	.034	.760	.018	.237	.033
.650	.109	.129	.105	.650	.123	.172	.039	.650	.093	.215	.044	.705	.021	.215	.023
.596	.166	.108	.093	.596	.206	.151	.126	.596	.123	.194	.053	.650	.038	.194	.021
.541	.219	.086	.218	.541	.254	.129	.101	.541	.173	.172	.063	.596	.088	.172	.037
.486	.265	.065	.212	.486	.270	.108	.195	.486	.188	.151	.080	.541	.104	.151	.052
.432	.330	.043	.277	.432	.230	.086	.234	.432	.171	.129	.105	.486	.119	.129	.063
.377	.246	.022	.294	.377	.187	.065	.214	.377	.185	.108	.090	.432	.138	.108	.073
.322	.232	0.000	.326	.322	.149	.043	.230	.322	.172	.086	.148	.377	.119	.086	.084
.268	.207	-.022	.331	.268	.101	.022	.267	.268	.128	.065	.161	.322	.115	.065	.096
.213	.149	-.043	.246	.213	.077	0.000	.270	.213	.110	.043	.170	.268	.103	.043	.114
.158	.118	-.065	.183	.158	.063	-.022	.199	.158	.094	.022	.176	.213	.079	.022	.131
.104	.080	-.086	.121	.104	.034	-.043	.181	.104	.076	0.000	.188	.158	.054	0.000	.138
.049	.042	-.108	.067	.049	.011	-.065	.157	.049	.053	-.022	.161	.104	.039	-.022	.126
0.000	0.000	-.129	.063	0.000	0.000	-.086	.115	0.000	0.000	-.043	.152	.049	.039	-.043	.124
0.000	0.000	-.151	.058	0.000	0.000	-.108	.086	0.000	0.000	-.065	.145	0.000	0.000	-.065	.116
0.000	0.000	-.172	.030	0.000	0.000	-.129	.068	0.000	0.000	-.086	.155	0.000	0.000	-.086	.114
0.000	0.000	-.194	.025	0.000	0.000	-.151	.039	0.000	0.000	-.108	.113	0.000	0.000	-.108	.088
0.000	0.000	-.215	.001	0.000	0.000	-.172	.021	0.000	0.000	-.129	.112	0.000	0.000	-.129	.061
0.000	0.000	0.000	0.000	0.000	0.000	-.194	.012	0.000	0.000	-.151	.105	0.000	0.000	-.151	.071
0.000	0.000	0.000	0.000	0.000	0.000	-.215	.010	0.000	0.000	-.172	.081	0.000	0.000	-.172	.061
0.000	0.000	0.000	0.000	0.000	0.000	-.237	.004	0.000	0.000	-.194	.064	0.000	0.000	-.194	.046
0.000	0.000	0.000	0.000	0.000	0.000	-.258	.001	0.000	0.000	-.215	.060	0.000	0.000	-.215	.031
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.237	.037	0.000	0.000	-.237	.020
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.258	.024	0.000	0.000	-.258	.033
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.280	.004	0.000	0.000	-.280	.018
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.301	.002	0.000	0.000	-.301	.003
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.544373	1.919429		.484276	1.859753		.542647	1.744912		.551091		1.544450				
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A		VARIANCE A				
.022788	.022964		.021467	.024276		.026849	.011615		.025065		.051507				
VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B		VARIANCE B				
.018426	.014420		.014118	.025602		.010871	.051244		.021871		.047003				
AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T		AVERAGE T				
.1416	.1337		.1173	.1040		.1052	.0883		.0640		.0581				

TABLE 4 - continued

MEDIUM NOZZLE DIAMETER = 1.094CH											
JET STRENGTH = 3.82				FROUDE NO. = 72.00							
STATION 1.00				STATION 2.00				STATION 3.00			
VERTICAL	DT	HORIZ	Y/D = .43	VERTICAL	DT	HORIZ	Y/D = .43	VERTICAL	DT	HORIZ	Y/D = .43
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.617	0.000	.129	0.000	.816	0.000	.129	0.000	.816	0.000	.129	0.000
.596	.025	.118	.012	.814	.012	.118	.026	.814	.014	.129	.034
.574	.175	.108	.046	.792	.021	.108	.048	.792	.030	.118	.091
.552	.652	.097	.201	.770	.027	.097	.072	.770	.031	.108	.145
.510	1.155	.086	.637	.749	.047	.086	.137	.749	.045	.097	.208
.508	1.584	.075	1.235	.727	.093	.075	.252	.727	.053	.086	.230
.486	1.971	.065	1.880	.705	.136	.065	.487	.705	.132	.075	.274
.464	2.160	.054	2.129	.683	.199	.054	.653	.683	.210	.065	.426
.443	2.074	.043	2.139	.661	.252	.043	.796	.661	.258	.054	.600
.421	1.874	.032	2.160	.639	.387	.032	1.006	.639	.284	.043	.659
.399	1.274	.022	1.643	.617	.469	.022	1.056	.617	.335	.032	.689
.377	.670	.011	1.023	.595	.763	.011	1.107	.595	.384	.022	.651
.355	.181	0.000	.569	.574	.739	0.000	1.049	.574	.425	.011	.701
.333	.039	-.011	.357	.552	.896	-.011	1.072	.552	.588	0.000	.698
.311	.006	-.022	.087	.531	1.018	-.022	1.057	.530	.606	-.011	.669
.290	.004	-.032	.004	.509	1.107	-.032	.914	.508	.623	-.022	.587
0.000	0.000	0.000	0.000	.486	1.197	-.043	.741	.486	.603	-.032	.582
0.000	0.000	0.000	0.000	.464	.960	-.054	.601	.464	.701	-.043	.581
0.000	0.000	0.000	0.000	.443	.949	-.065	.369	.443	.573	-.054	.509
0.000	0.000	0.000	0.000	.421	.851	-.075	.305	.421	.620	-.065	.473
0.000	0.000	0.000	0.000	.399	.625	-.086	.165	.399	.647	-.075	.366
0.000	0.000	0.000	0.000	.377	.673	-.097	.073	.377	.644	-.086	.244
0.000	0.000	0.000	0.000	.355	.541	-.108	.037	.355	.560	-.097	.155
0.000	0.000	0.000	0.000	.333	.358	-.119	.006	.333	.408	-.108	.108
0.000	0.000	0.000	0.000	.311	.217	-.129	.003	.311	.350	-.118	.073
0.000	0.000	0.000	0.000	.290	.114	0.000	0.000	.290	.291	-.129	.019
0.000	0.000	0.000	0.000	.268	.059	0.000	0.000	.268	.203	-.140	.006
0.000	0.000	0.000	0.000	.246	.024	0.000	0.000	.246	.152	0.000	.000
0.000	0.000	0.000	0.000	.224	0.000	0.000	0.000	.224	.102	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.202	.038	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.180	.009	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.158	.005	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.490217		1.85358R		.463366		1.935451		.486341		1.93538R	
VARIANCE A		.002384		VARIANCE A		.006700		VARIANCE A		.010706	
.002199		.002384		.008270		.012173		.012173		.018337	
VARIANCE R		.002953		VARIANCE R		.008570		VARIANCE R		.013294	
.002677		.002953		.008570		.012758		.012758		.019509	
AVERAGE T		.8828		AVERAGE T		.4813		AVERAGE T		.3603	
.8756		.8828		.4429		.4813		.3102		.3603	

MEDIUM NOZZLE DIAMETER = 1.094CH											
JET STRENGTH = 3.82				FROUDE NO. = 72.00							
STATION 5.00				STATION 6.00				STATION 7.00			
VERTICAL	DT	HORIZ	Y/D = .43	VERTICAL	DT	HORIZ	Y/D = .43	VERTICAL	DT	HORIZ	Y/D = .43
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.814	0.000	.215	0.000	.869	0.000	.258	0.000	.923	0.000	.258	0.000
.760	.024	.194	.033	.814	.016	.237	.020	.869	.011	.237	.007
.705	.122	.172	.044	.760	.055	.215	.100	.814	.028	.215	.019
.650	.192	.151	.121	.705	.079	.194	.080	.760	.061	.194	.023
.596	.263	.129	.160	.650	.188	.172	.130	.705	.094	.172	.036
.541	.306	.108	.255	.596	.210	.151	.136	.650	.158	.151	.088
.486	.428	.086	.352	.541	.245	.129	.186	.596	.246	.129	.166
.432	.455	.065	.427	.486	.295	.108	.188	.541	.253	.108	.218
.377	.428	.043	.421	.432	.362	.086	.315	.486	.269	.086	.255
.322	.372	.022	.455	.377	.380	.065	.343	.432	.320	.065	.247
.268	.270	0.000	.427	.322	.377	.043	.380	.377	.293	.043	.271
.213	.264	-.022	.350	.268	.340	.022	.380	.322	.261	.022	.320
.158	.121	-.043	.403	.213	.312	0.000	.337	.268	.273	0.000	.310
.104	.052	-.065	.337	.158	.255	-.022	.301	.213	.261	-.022	.264
.049	.018	-.086	.254	.104	.200	-.043	.291	.158	.239	-.043	.239
0.000	0.000	-.108	.204	.049	.158	-.065	.201	.104	.194	-.065	.246
0.000	0.000	-.129	.168	0.000	0.000	-.086	.233	.049	.107	-.086	.149
0.000	0.000	-.151	.132	0.000	0.000	-.108	.215	0.000	0.000	-.108	.179
0.000	0.000	-.172	.070	0.000	0.000	-.129	.115	0.000	0.000	-.129	.119
0.000	0.000	-.194	.040	0.000	0.000	-.151	.068	0.000	0.000	-.151	.092
0.000	0.000	-.215	.014	0.000	0.000	-.172	.061	0.000	0.000	-.172	.060
0.000	0.000	-.237	.004	0.000	0.000	-.194	.023	0.000	0.000	-.194	.040
0.000	0.000	0.000	0.000	0.000	0.000	-.215	.020	0.000	0.000	-.215	.027
0.000	0.000	0.000	0.000	0.000	0.000	-.237	.015	0.000	0.000	-.237	.017
0.000	0.000	0.000	0.000	0.000	0.000	-.258	0.000	0.000	0.000	-.258	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.527577		1.931047		.578190		1.909996		.561172		1.931798	
VARIANCE A		.024505		VARIANCE A		.034140		VARIANCE A		.024643	
.018700		.024505		.027263		.034140		.031323		.024643	
VARIANCE R		.029000		VARIANCE R		.031807		VARIANCE R		.029784	
.020247		.029000		.031807		.032746		.035358		.029784	
AVERAGE T		.2171		AVERAGE T		.2176		AVERAGE T		.1356	
.2171		.2171		.2176		.2176		.1356		.1356	

TABLE 4 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 3.82								FROUDE NO. = 72.00							
STATION 4.00				STATION 10.00				STATION 0.00				STATION 0.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	Y/D	Y/D	DT	Z/HW	Y/D	Y/D	DT	Z/HW	Y/D	Y/D	DT	Z/HW	Y/D
.978	.005	.344	0.000	.978	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.923	.028	.323	.006	.923	.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.869	.050	.301	.013	.869	.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.814	.086	.280	.034	.814	.060	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.760	.104	.258	.040	.760	.068	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.705	.155	.237	.055	.705	.116	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.650	.186	.215	.070	.650	.131	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.596	.197	.194	.082	.596	.136	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.541	.192	.172	.102	.541	.184	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.486	.228	.151	.115	.486	.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.432	.205	.129	.128	.432	.166	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.377	.219	.108	.140	.377	.189	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.322	.198	.086	.146	.322	.161	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.268	.166	.065	.164	.268	.160	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.213	.125	.043	.183	.213	.136	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.159	.111	.022	.200	.159	.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.104	.079	0.000	.209	.104	.089	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.022	.209	.089	.065	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.043	.189	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.065	.160	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.086	.128	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.108	.103	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.129	.072	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.151	.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.172	.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.194	.037	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.215	.034	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.237	.034	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.258	.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.280	.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.301	.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.323	.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.344	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.476979	1.892215	.511225	0.000000	.476979	1.892215	.511225	0.000000	.476979	1.892215	.511225	0.000000	.476979	1.892215	.511225	0.000000
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.034228	.055724	.036845	0.000000	.034228	.055724	.036845	0.000000	.034228	.055724	.036845	0.000000	.034228	.055724	.036845	0.000000
VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B
.040167	.042235	.039283	0.000000	.040167	.042235	.039283	0.000000	.040167	.042235	.039283	0.000000	.040167	.042235	.039283	0.000000
AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T
.1372	.0854	.1122	0.0000	.1372	.0854	.1122	0.0000	.1372	.0854	.1122	0.0000	.1372	.0854	.1122	0.0000

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 5.84								FROUDE NO. = 107.00							
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	Y/D	Y/D	DT	Z/HW	Y/D	Y/D	DT	Z/HW	Y/D	Y/D	DT	Z/HW	Y/D
.617	0.000	.086	0.000	.683	0.000	.129	0.000	.749	0.000	.172	0.000	.770	0.000	.215	0.000
.596	.057	.075	.370	.661	.040	.108	.133	.727	.028	.151	.054	.749	.052	.194	.042
.574	.271	.065	1.031	.639	.055	.086	.421	.705	.093	.129	.215	.727	.075	.172	.073
.552	.879	.054	1.802	.617	.202	.065	.918	.683	.239	.108	.343	.705	.067	.151	.290
.530	1.293	.043	2.432	.596	.373	.043	1.262	.661	.176	.086	.569	.683	.107	.129	.191
.508	2.001	.032	2.765	.574	.459	.022	1.500	.639	.125	.065	.740	.661	.165	.108	.304
.486	2.508	.022	2.755	.552	.670	0.000	1.374	.617	.401	.043	.764	.639	.252	.086	.632
.464	2.765	.011	2.479	.530	.882	-.022	.925	.596	.457	.022	.927	.617	.257	.065	.733
.443	2.765	0.000	1.698	.508	1.179	-.043	.638	.574	.491	0.000	.873	.596	.384	.043	.731
.421	2.601	-.011	1.067	.486	1.249	-.045	.294	.552	.498	-.022	.808	.574	.304	.022	.700
.399	2.458	-.022	.724	.464	1.313	-.086	.126	.530	.559	-.043	.684	.552	.379	0.000	.705
.377	2.251	-.032	.365	.443	1.500	-.108	.070	.508	.640	-.065	.534	.530	.456	-.022	.622
.355	1.566	-.043	.141	.421	1.295	-.129	.014	.486	.767	-.086	.323	.508	.546	-.043	.577
.333	.822	-.054	.016	.399	1.176	0.000	0.000	.464	.691	-.108	.237	.486	.541	-.065	.427
.311	.450	-.065	.021	.377	1.044	0.000	0.000	.443	.709	-.129	.143	.464	.608	-.086	.236
.290	.179	-.075	.010	.355	.967	0.000	0.000	.421	.846	-.151	.046	.443	.648	-.108	.184
.268	.064	-.086	.010	.333	.781	0.000	0.000	.399	.927	-.172	.004	.421	.733	-.129	.075
.246	0.000	0.000	0.000	.311	.655	0.000	0.000	.377	.800	0.000	0.000	.399	.648	-.151	.120
0.000	0.000	0.000	0.000	.290	.505	0.000	0.000	.355	.790	0.000	0.000	.377	.474	-.172	.068
0.000	0.000	0.000	0.000	.268	.410	0.000	0.000	.333	.709	0.000	0.000	.355	.646	-.194	.028
0.000	0.000	0.000	0.000	.246	.251	0.000	0.000	.311	.654	0.000	0.000	.333	.516	-.215	.005
0.000	0.000	0.000	0.000	.224	.168	0.000	0.000	.290	.491	0.000	0.000	.311	.649	0.000	0.000
0.000	0.000	0.000	0.000	.202	.037	0.000	0.000	.268	.433	0.000	0.000	.290	.581	0.000	0.000
0.000	0.000	0.000	0.000	.180	.017	0.000	0.000	.246	.229	0.000	0.000	.268	.496	0.000	0.000
0.000	0.000	0.000	0.000	.159	0.000	0.000	0.000	.224	.151	0.000	0.000	.246	.494	0.000	0.000
0.000	0.000	0.000	0.000	.137	0.000	0.000	0.000	.202	.083	0.000	0.000	.224	.366	0.000	0.000
0.000	0.000	0.000	0.000	.116	0.000	0.000	0.000	.180	.025	0.000	0.000	.202	.262	0.000	0.000
0.000	0.000	0.000	0.000	.094	0.000	0.000	0.000	.159	.002	0.000	0.000	.180	.160	0.000	0.000
0.000	0.000	0.000	0.000	.073	0.000	0.000	0.000	.137	.005	0.000	0.000	.159	.137	0.000	0.000
0.000	0.000	0.000	0.000	.052	0.000	0.000	0.000	.116	0.000	0.000	0.000	.137	.207	0.000	0.000

TABLE 4 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 5.44				FROUDE NO. = 107.00											
STATION 5.00				STATION 6.00				STATION 7.00				STATION 8.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	Y/D	Y/D	DT	Z/HW	Y/D	Y/D	DT	Z/HW	Y/D	Y/D	DT	Z/HW	Y/D
.814	0.000	.258	0.000	.880	0.000	.301	0.000	.923	0.000	.301	0.000	.923	.002	.344	0.000
.792	.025	.237	.044	.858	.007	.280	.005	.869	.024	.280	.025	.869	.036	.323	.016
.770	.031	.215	.018	.836	.010	.258	.022	.814	.032	.258	.040	.814	.015	.301	.044
.749	.035	.194	.163	.814	.014	.237	.058	.760	.112	.237	.054	.760	.036	.280	.037
.727	.033	.172	.264	.792	.025	.215	.074	.705	.160	.215	.151	.705	.045	.258	.104
.705	.021	.151	.352	.770	.064	.194	.169	.650	.194	.194	.103	.650	.099	.237	.140
.683	.039	.129	.362	.749	.071	.172	.304	.596	.239	.172	.181	.596	.114	.215	.148
.661	.058	.108	.333	.727	.082	.151	.328	.541	.279	.151	.209	.541	.203	.194	.092
.639	.129	.086	.512	.705	.071	.129	.368	.486	.377	.129	.364	.486	.256	.172	.130
.617	.240	.065	.553	.683	.130	.108	.422	.432	.393	.108	.388	.432	.273	.151	.148
.596	.292	.043	.592	.661	.204	.086	.437	.377	.401	.086	.384	.377	.291	.129	.258
.574	.308	.022	.553	.639	.172	.065	.483	.322	.355	.065	.375	.322	.313	.108	.295
.552	.327	0.000	.553	.617	.227	.043	.441	.268	.399	.043	.401	.268	.337	.086	.309
.530	.370	-.022	.576	.596	.312	.022	.446	.213	.389	.022	.384	.213	.266	.065	.337
.518	.399	-.043	.517	.574	.341	0.000	.426	.158	.299	0.000	.373	.158	.229	.043	.272
.486	.448	-.065	.408	.552	.370	-.022	.446	.104	.197	-.022	.337	.104	.197	.022	.252
.464	.468	-.086	.326	.530	.373	-.043	.388	.049	.237	-.043	.333	.049	.110	0.000	.321
.443	.522	-.108	.266	.508	.374	-.065	.386	0.000	0.000	-.065	.343	0.000	0.000	-.022	.333
.421	.592	-.129	.323	.486	.382	-.086	.329	0.000	0.000	-.086	.309	0.000	0.000	-.043	.252
.399	.545	-.151	.147	.464	.431	-.108	.230	0.000	0.000	-.108	.228	0.000	0.000	-.065	.288
.377	.573	-.172	.109	.443	.458	-.129	.169	0.000	0.000	-.129	.184	0.000	0.000	-.086	.248
.355	.495	-.194	.085	.421	.469	-.151	.127	0.000	0.000	-.151	.150	0.000	0.000	-.108	.246
.333	.386	-.215	.070	.399	.483	-.172	.081	0.000	0.000	-.172	.099	0.000	0.000	-.129	.207
.311	.335	-.237	.031	.377	.478	-.194	.033	0.000	0.000	-.194	.074	0.000	0.000	-.151	.166
.290	.290	-.258	.003	.355	.457	-.215	.025	0.000	0.000	-.215	.050	0.000	0.000	-.172	.102
.268	.290	0.000	0.000	.333	.440	-.237	.017	0.000	0.000	-.237	.065	0.000	0.000	-.194	.108
.246	.255	0.000	0.000	.311	.419	-.258	.010	0.000	0.000	-.258	.026	0.000	0.000	-.215	.053
.224	.191	0.000	0.000	.290	.377	-.280	.004	0.000	0.000	-.280	.015	0.000	0.000	-.237	.053
.202	.152	0.000	0.000	.268	.304	-.301	.003	0.000	0.000	-.301	.001	0.000	0.000	-.258	.040
.180	.167	0.000	0.000	.246	.284	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.280	.030
.158	.146	0.000	0.000	.224	.272	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.301	.014
.137	.107	0.000	0.000	.202	.239	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.323	.009
.115	.062	0.000	0.000	.180	.198	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.344	.001
.093	.031	0.000	0.000	.158	.156	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.071	.002	0.000	0.000	.137	.106	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.049	.010	0.000	0.000	.115	.079	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.093	.048	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.071	.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.049	.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.027	.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.005	.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN			MEAN	MEAN			MEAN	MEAN			MEAN	MEAN		
.536063	1.909356			.531340	1.881033			.567466	1.900820			.588062	1.903351		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.015324	.036517			.020049	.037412			.031822	.046986			.027525	.062982		
VARIANCE R	VARIANCE R			VARIANCE R	VARIANCE R			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B		
.012693	.040414			.022009	.045948			.038992	.054786			.026792	.062076		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.2323	.2864			.2190	.2148			.2405	.1947			.1660	.1531		

TABLE 4 - continued

MEDIUM NOZZLE DIAMETER = 1.004CH															
JET STRENGTH = 5.84								FROUDE NO. = 107.00							
STATION 0.00				STATION 1.00				STATION 2.00				STATION 3.00			
VERTICAL		HORIZ		VERTICAL		HORIZ		VERTICAL		HORIZ		VERTICAL		HORIZ	
Y/D	DT	Y/D	DT	Y/D	DT	Y/D	DT	Y/D	DT	Y/D	DT	Y/D	DT	Y/D	DT
0.078	0.004	0.187	0.000	0.074	0.000	0.430	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.073	0.027	0.366	0.001	0.073	0.047	0.409	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.069	0.040	0.364	0.005	0.049	0.117	0.387	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.054	0.054	0.373	0.010	0.041	0.161	0.364	0.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.040	0.074	0.360	0.015	0.040	0.162	0.342	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.005	0.138	0.280	0.022	0.005	0.186	0.321	0.053	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.150	0.258	0.063	0.000	0.154	0.301	0.064	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.209	0.237	0.059	0.000	0.186	0.280	0.077	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.001	0.185	0.215	0.000	0.001	0.200	0.258	0.095	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.227	0.194	0.148	0.000	0.155	0.237	0.111	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.234	0.172	0.171	0.000	0.230	0.215	0.136	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.284	0.163	0.177	0.000	0.218	0.194	0.158	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.235	0.129	0.164	0.000	0.122	0.186	0.172	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.214	0.108	0.206	0.000	0.167	0.151	0.180	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.206	0.086	0.236	0.000	0.204	0.129	0.196	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.203	0.065	0.260	0.000	0.158	0.108	0.210	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.174	0.043	0.264	0.000	0.174	0.074	0.086	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.126	0.027	0.284	0.000	0.049	0.021	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.251	0.000	0.000	0.000	0.220	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.022	0.000	0.000	0.000	0.230	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.043	0.000	0.000	0.000	0.220	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.065	0.000	0.000	0.000	0.217	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.086	0.000	0.000	0.000	0.226	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.108	0.000	0.000	0.000	0.206	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.129	0.000	0.000	0.000	0.185	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.150	0.000	0.000	0.000	0.177	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.172	0.000	0.000	0.000	0.161	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.194	0.000	0.000	0.000	0.148	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.215	0.000	0.000	0.000	0.137	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.237	0.000	0.000	0.000	0.122	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.258	0.000	0.000	0.000	0.101	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.280	0.000	0.000	0.000	0.079	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.301	0.000	0.000	0.000	0.058	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.323	0.000	0.000	0.000	0.040	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.344	0.000	0.000	0.000	0.027	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.366	0.000	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.387	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.409	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.430	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.452	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.473	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.495	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.516	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.538	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.559	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.581	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.602	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.624	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.645	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.667	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.688	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.731	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.753	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.774	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.796	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.817	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.839	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.860	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.882	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.903	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.925	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.946	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.968	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.989	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	1.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	1.032	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	1.054	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	1.075	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	1.097	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	1.118	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	1.140	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	1.161	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	1.183	0.000	0.000	0.000	0.000								

TABLE 4 - continued

LARGE NOZZLE DIAMETER = 1.882CM															
JET STRENGTH = .44				FROUDE NO. = 8.20				STATION 1.00				STATION 3.00			
VERTICAL	DT	HORIZ	Y/D = .53	VERTICAL	DT	HORIZ	Y/D = .53	VERTICAL	DT	HORIZ	Y/D = .45	VERTICAL	DT	HORIZ	Y/D = .60
Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW	
.770	0.000	.097	0.000	.814	0.000	.129	0.000	.858	0.000	.172	0.000	.923	0.000	.215	0.000
.749	.058	.086	.024	.792	.018	.118	.010	.836	.040	.151	.044	.902	.022	.194	.023
.777	.147	.075	.167	.770	.022	.108	.050	.814	.066	.129	.054	.880	.014	.172	.042
.705	.245	.065	.200	.749	.051	.097	.058	.792	.046	.108	.132	.858	.043	.151	.077
.683	.532	.054	.305	.727	.058	.086	.124	.770	.115	.086	.216	.836	.070	.129	.073
.661	.603	.043	.735	.705	.078	.075	.197	.749	.194	.065	.245	.814	.068	.108	.102
.619	.766	.032	.971	.683	.133	.065	.176	.727	.254	.043	.257	.792	.062	.086	.156
.617	.930	.022	1.069	.661	.208	.054	.176	.705	.300	.022	.271	.770	.082	.065	.183
.596	.980	.011	1.174	.639	.250	.047	.318	.683	.273	0.000	.305	.749	.099	.043	.160
.574	.974	0.000	1.280	.617	.352	.032	.370	.661	.318	-.022	.410	.727	.123	.022	.210
.552	.951	-.011	1.116	.596	.388	.022	.433	.639	.334	-.043	.403	.705	.212	0.000	.268
.530	1.264	-.022	.920	.574	.441	.011	.474	.617	.366	-.065	.311	.683	.207	-.022	.156
.486	1.693	-.043	.651	.552	.496	0.000	.595	.596	.410	-.086	.207	.661	.306	-.043	.224
.466	.980	-.054	.516	.530	.625	-.011	.625	.574	.334	-.108	.196	.639	.303	-.065	.120
.444	.769	-.065	.276	.508	.607	-.022	.570	.552	.362	-.129	.114	.617	.320	-.086	.256
.421	.622	-.075	.171	.486	.461	-.032	.426	.530	.347	-.151	.023	.596	.315	-.108	.191
.399	.419	-.086	.051	.464	.412	-.043	.446	.508	.351	-.172	.021	.574	.250	-.129	.137
.377	.261	-.097	.025	.443	.348	-.054	.353	.486	.324	-.194	.003	.552	.240	-.151	.081
.355	.179	0.000	0.000	.421	.337	-.065	.310	.466	.287	-.215	0.000	.530	.202	-.172	.050
.333	.113	0.000	0.000	.399	.233	-.075	.260	.443	.275	0.000	0.000	.508	.216	-.194	.021
.311	.068	0.000	0.000	.377	.155	-.086	.184	.421	.217	0.000	0.000	.486	.222	-.215	0.000
.290	.029	0.000	0.000	.355	.098	-.097	.129	.399	.232	0.000	0.000	.466	.181	-.237	.002
.268	.008	0.000	0.000	.333	.051	-.108	.055	.377	.231	0.000	0.000	.443	.173	0.000	0.000
0.000	0.000	0.000	0.000	.311	.020	-.118	.035	.355	.189	0.000	0.000	.421	.139	0.000	0.000
0.000	0.000	0.000	0.000	.290	.007	-.129	.005	.333	.206	0.000	0.000	.399	.099	0.000	0.000
0.000	0.000	0.000	0.000	.268	.002	0.000	0.000	.311	.184	0.000	0.000	.377	.125	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.290	.186	0.000	0.000	.355	.103	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.268	.153	0.000	0.000	.333	.080	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.246	.112	0.000	0.000	.311	.043	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.224	.079	0.000	0.000	.290	.021	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.202	.056	0.000	0.000	.268	.002	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.180	.025	0.000	0.000	.246	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.158	.003	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.473791		1.939271		.431130		1.952053		.430871		1.954712		.383425		1.965246	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.006927		.004572		.006863		.008730		.018882		.018665		.013953		.028013	
VARIANCE R		VARIANCE R		VARIANCE R		VARIANCE R		VARIANCE R		VARIANCE R		VARIANCE R		VARIANCE R	
.006845		.004584		.005645		.007246		.018503		.016549		.011745		.020101	
AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T	
.5532		.5495		.2264		.2561		.2119		.1670		.1358		.1241	

LARGE NOZZLE DIAMETER = 1.882CM															
JET STRENGTH = .44				FROUDE NO. = 8.20				STATION 5.00				STATION 7.00			
VERTICAL	DT	HORIZ	Y/D = .65	VERTICAL	DT	HORIZ	Y/D = .65	VERTICAL	DT	HORIZ	Y/D = .70	VERTICAL	DT	HORIZ	Y/D = 0.00
Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW	
.978	.082	.258	0.000	.978	.059	.258	0.000	.978	.086	.258	0.000	0.000	0.000	0.000	0.000
.923	.146	.237	.008	.923	.071	.237	.011	.923	.101	.237	.011	0.000	0.000	0.000	0.000
.869	.180	.215	.015	.869	.087	.215	.014	.869	.130	.215	.024	0.000	0.000	0.000	0.000
.814	.225	.194	.023	.814	.104	.194	.022	.814	.160	.194	.012	0.000	0.000	0.000	0.000
.760	.250	.172	.006	.760	.144	.172	.030	.760	.181	.172	.022	0.000	0.000	0.000	0.000
.705	.213	.151	.027	.705	.166	.151	.039	.705	.200	.151	.080	0.000	0.000	0.000	0.000
.650	.206	.129	.091	.650	.185	.129	.075	.650	.177	.129	.081	0.000	0.000	0.000	0.000
.596	.163	.108	.128	.596	.219	.108	.106	.596	.150	.108	.127	0.000	0.000	0.000	0.000
.541	.122	.086	.158	.541	.230	.086	.097	.541	.119	.086	.158	0.000	0.000	0.000	0.000
.486	.092	.065	.150	.486	.209	.065	.166	.486	.074	.065	.174	0.000	0.000	0.000	0.000
.432	.052	.043	.250	.432	.165	.043	.180	.432	.052	.043	.145	0.000	0.000	0.000	0.000
.377	.020	.022	.206	.377	.114	.022	.230	.377	.035	.022	.178	0.000	0.000	0.000	0.000
.322	.010	0.000	.234	.322	.079	0.000	.216	.322	.021	0.000	.200	0.000	0.000	0.000	0.000
0.000	0.000	-.022	.205	.268	.049	-.022	.226	.268	.024	-.022	.169	0.000	0.000	0.000	0.000
0.000	0.000	-.043	.207	.213	.023	-.043	.175	.213	.008	-.043	.143	0.000	0.000	0.000	0.000
0.000	0.000	-.065	.219	.158	.012	-.065	.207	.158	.003	-.065	.115	0.000	0.000	0.000	0.000
0.000	0.000	-.086	.230	0.000	0.000	-.086	.169	0.000	0.000	-.086	.093	0.000	0.000	0.000	0.000
0.000	0.000	-.108	.157	0.000	0.000	-.108	.164	0.000	0.000	-.108	.080	0.000	0.000	0.000	0.000
0.000	0.000	-.129	.116	0.000	0.000	-.129	.139	0.000	0.000	-.129	.067	0.000	0.000	0.000	0.000
0.000	0.000	-.151	.091	0.000	0.000	-.151	.091	0.000	0.000	-.151	.043	0.000	0.000	0.000	0.000
0.000	0.000	-.172	.065	0.000	0.000	-.172	.074	0.000	0.000	-.172	.031	0.000	0.000	0.000	0.000
0.000	0.000	-.194	.040	0.000	0.000	-.194	.059	0.000	0.000	-.194	.024	0.000	0.000	0.000	0.000
0.000	0.000	-.215	.024	0.000	0.000	-.215	.016	0.000	0.000	-.215	.024	0.000	0.000	0.000	0.000
0.000	0.000	-.237	.013	0.000	0.000	-.237	.012	0.000	0.000	-.237	.003	0.000	0.000	0.000	0.000
0.000	0.000	-.258	.006	0.000	0.000	-.258	.004	0.000	0.000	-.258	.011	0.000	0.000	0.000	0.000
0.000	0.000	-.280	.002	0.000	0.000	-.280	0.000	0.000	0.000	-.280	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.255593		1.979007		.367713		1.973860		.280844		1.921614		0.000000		0.000000	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.018187		.011144		.028005		.013039		.024431		.037752		0.000000		0.000000	
VARIANCE R		VARIANCE R		VARIANCE R		VARIANCE R		VARIANCE R		VARIANCE R		VARIANCE R		VARIANCE R	
.019100		.013119		.026675		.013205		.021760		.028199		0.000000		0.000000	
AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T	
.1371		.1027		.1198		.0970		.0952		.0777		0.0000		0.0000	

TABLE 4 - continued

LARGE NOZZLE DIAMETER = 1.000CM															
JFI STRENGTH = 1.20								FROUSE NO. = 31.00							
STATION 1.00				STATION 2.00				STATION 1.00				STATION 4.00			
VERTICAL		HORIZ		VERTICAL		HORIZ		VERTICAL		HORIZ		VERTICAL		HORIZ	
Y/D	DT	Y/D	DT	Y/D	DT	Y/D	DT	Y/D	DT	Y/D	DT	Y/D	DT	Y/D	DT
.705	0.000	.047	0.000	.814	0.000	.124	.001	.816	0.000	.215	0.000	.923	.077	.258	0.000
.683	.159	.086	.105	.792	.056	.118	.020	.814	.056	.194	.042	.902	.111	.237	.018
.661	.256	.075	.329	.770	.142	.108	.070	.792	.204	.172	.099	.880	.123	.215	.027
.639	.401	.065	.463	.749	.240	.097	.164	.770	.228	.151	.201	.858	.147	.194	.040
.617	1.326	.054	.636	.727	.402	.086	.279	.749	.221	.129	.283	.836	.173	.172	.054
.596	1.461	.043	.878	.705	.427	.075	.468	.727	.238	.108	.365	.814	.186	.151	.060
.574	2.149	.032	1.333	.683	.661	.065	.611	.705	.357	.086	.639	.792	.240	.129	.149
.552	2.293	.022	2.137	.661	.646	.054	.672	.683	.434	.065	.606	.770	.268	.108	.169
.530	2.625	.011	2.625	.639	.767	.043	.815	.661	.514	.043	.518	.749	.296	.086	.159
.508	2.176	0.000	2.449	.617	.743	.032	.908	.639	.456	.022	.566	.727	.450	.065	.313
.486	1.371	-.011	2.123	.596	.724	.022	.902	.617	.580	0.000	.631	.705	.444	.043	.503
.464	.477	-.022	1.750	.574	1.065	.011	.975	.596	.665	-.022	.730	.683	.459	.022	.481
.443	.615	-.032	1.326	.552	.923	0.000	1.065	.574	.736	-.043	.637	.661	.541	0.000	.536
.421	.238	-.043	.817	.530	.788	-.011	.946	.552	.711	-.065	.702	.639	.575	-.022	.575
.399	.031	-.054	.519	.508	.698	-.022	.908	.530	.597	-.086	.614	.617	.500	-.043	.486
.377	.003	-.065	.231	.486	.561	-.032	.908	.508	.469	-.108	.523	.596	.440	-.065	.407
0.000	0.000	-.075	.112	.464	.399	-.043	.780	.486	.439	-.129	.396	.574	.401	-.086	.325
0.000	0.000	-.086	.041	.443	.376	-.054	.722	.464	.415	-.151	.331	.552	.368	-.108	.226
0.000	0.000	-.097	.014	.421	.326	-.065	.573	.443	.395	-.172	.311	.530	.325	-.129	.194
0.000	0.000	0.000	0.000	.399	.267	-.075	.512	.421	.318	-.194	.218	.508	.269	-.151	.117
0.000	0.000	0.000	0.000	.377	.221	-.086	.346	.399	.250	-.215	.102	.486	.202	-.172	.127
0.000	0.000	0.000	0.000	.355	.191	-.097	.250	.377	.192	-.237	.014	.464	.149	-.194	.050
0.000	0.000	0.000	0.000	.333	.107	-.108	.105	.355	.131	-.258	.003	.443	.085	-.215	.042
0.000	0.000	0.000	0.000	.311	.064	-.118	.081	.333	.085	0.000	0.000	.421	.059	-.237	.005
0.000	0.000	0.000	0.000	.290	.015	-.129	.032	.311	.065	0.000	0.000	.399	.040	-.258	.002
0.000	0.000	0.000	0.000	.268	-.096	-.140	0.000	.290	.034	0.000	0.000	.377	.024	0.000	0.000
0.000	0.000	0.000	0.000	.246	0.000	0.000	0.000	.268	.017	0.000	0.000	.355	.015	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.246	.002	0.000	0.000	.333	.008	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.311	.003	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.290	.004	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.268	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.418055	1.931851			.393483	1.941959			.393645	1.940814			.315215	1.959408		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.002482	.003716			.008985	.009419			.010839	.033137			.011390	.026608		
VARIANCE R	VARIANCE R			VARIANCE R	VARIANCE R			VARIANCE R	VARIANCE R			VARIANCE R	VARIANCE R		
.002365	.003168			.006519	.010482			.009297	.035115			.009277	.021470		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
1.0001	.9360			.3991	.5046			.3151	.3579			.2251	.2028		

LARGE NOZZLE DIAMETER = 1.8R2CM															
JET STRENGTH = 1.20								FROUDE NO. = 33.00							
STATION 5.00				STATION 0.00				STATION 0.00				STATION 0.00			
VERTICAL	HORIZ	Y/D=.66		VERTICAL	HORIZ	Y/D=0.00		VERTICAL	HORIZ	Y/D=0.00		VERTICAL	HORIZ	Y/D=0.00	
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.967	.114	.301	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.965	.178	.280	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.921	.188	.258	.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.902	.206	.237	.134	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.880	.212	.215	.235	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.858	.230	.194	.155	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.836	.281	.172	.164	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.814	.299	.151	.208	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.792	.279	.129	.235	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.77*	.480	.108	.378	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.749	.338	.086	.328	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.727	.477	.065	.351	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.705	.428	.043	.365	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.683	.368	.022	.325	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.661	.330	0.000	.445	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.639	.392	-.022	.413	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.617	.392	-.043	.473	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.596	.428	-.065	.408	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.574	.439	-.086	.468	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.552	.315	-.108	.480	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.530	.284	-.129	.325	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.508	.194	-.151	.286	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.486	.186	-.172	.268	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.464	.129	-.194	.108	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.443	.095	-.215	.159	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.421	.117	-.237	.102	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.399	.070	-.258	.058	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.377	.052	-.280	0.037	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.355	.031	-.301	.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.333	.008	-.323	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.311	0.000	-.344	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.286092		1.968847		0.000000		0.000000		0.000000		0.000000		0.000000		0.000000	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.016727		.050000		0.000000		0.000000		0.000000		0.000000		0.000000		0.000000	
VARIANCE H		VARIANCE H		VARIANCE H		VARIANCE H		VARIANCE H		VARIANCE H		VARIANCE H		VARIANCE H	
.015476		.057902		0.000000		0.000000		0.000000		0.000000		0.000000		0.000000	
AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T	
.2432		.2241		0.0000		0.0000		0.0000		0.0000		0.0000		0.0000	

TABLE 4 - continued

LARGE NOZZLE DIAMETER = 1.882CM											
JET STRENGTH = 1.72				FROUDE NO. = 22.60							
STATION 1.00				STATION 2.00				STATION 3.00			
VERTICAL	HORIZ	Y/D = .55		VERTICAL	HORIZ	Y/D = .60		VERTICAL	HORIZ	Y/D = .60	
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.727	0.000	.129	0.000	.814	0.000	.129	0.000	.880	0.003	.129	0.000
.705	.071	.118	0.000	.792	.038	.118	0.048	.858	.035	.118	.048
.681	.170	.108	.054	.770	.122	.104	.058	.836	.059	.108	.077
.661	.535	.097	.068	.749	.208	.087	.082	.814	.129	.087	.160
.639	.865	.086	.097	.727	.339	.086	.144	.792	.252	.086	.218
.617	1.108	.075	.204	.705	.589	.075	.116	.770	.369	.075	.365
.596	2.378	.065	.161	.683	1.049	.065	.116	.749	.530	.065	.307
.574	3.055	.054	.393	.661	.918	.054	.232	.727	.606	.054	.489
.552	4.108	.043	.536	.639	1.102	.043	.711	.705	.668	.043	.654
.530	4.175	.032	1.298	.617	1.238	.032	1.181	.683	.776	.032	.996
.508	3.335	.022	1.905	.596	1.750	.022	1.014	.661	1.022	.022	.912
.486	2.201	.011	3.757	.574	1.465	.011	1.391	.639	1.046	.011	.863
.464	1.478	0.000	4.107	.552	1.488	0.000	1.724	.617	.987	0.000	1.125
.443	.801	-.011	4.053	.530	1.280	-.011	1.695	.596	1.125	-.011	.925
.421	.699	-.022	4.175	.508	1.049	-.022	1.750	.574	.981	-.022	.832
.399	0.000	-.032	3.213	.486	.649	-.032	1.463	.552	.940	-.032	.889
0.000	0.000	-.043	1.748	.464	.230	-.043	1.220	.530	.703	-.043	.631
0.000	0.000	-.054	1.251	.443	.054	-.054	1.087	.508	.568	-.054	.378
0.000	0.000	-.065	.886	.421	0.000	-.065	.933	.486	.636	-.065	.311
0.000	0.000	-.075	.568	0.000	0.000	-.075	.742	.464	.434	-.075	.436
0.000	0.000	-.086	.357	0.000	0.000	-.086	.530	.443	.334	-.086	.142
0.000	0.000	-.097	.207	0.000	0.000	-.097	.390	.421	.284	-.097	.084
0.000	0.000	-.108	.132	0.000	0.000	-.108	.291	.399	.176	-.108	.036
0.000	0.000	-.118	.079	0.000	0.000	-.118	.219	.377	.129	-.118	.049
0.000	0.000	-.129	.011	0.000	0.000	-.129	.085	.355	.059	-.129	0.000
0.000	0.000	-.140	0.000	0.000	0.000	-.140	.038	.333	.006	0.000	.399
0.000	0.000	0.000	0.000	0.000	0.000	-.151	0.000	0.000	0.000	0.000	.377
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.355
MEAN	MEAN			MEAN	MEAN			MEAN	MEAN		
.415976	1.959102			.367869	1.973415			.360148	1.931192		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.002261	.004161			.004098	.007474			.008681	.007816		
VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B		
.002349	.003640			.003896	.006728			.008311	.006799		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
1.5918	1.1331			.7205	.6397			.4946	.4464		

LARGE NOZZLE DIAMETER = 1.882CM											
JET STRENGTH = 1.72				FROUDE NO. = 22.60							
STATION 5.00				STATION 6.00				STATION 7.00			
VERTICAL	HORIZ	Y/D = .66		VERTICAL	HORIZ	Y/D = .68		VERTICAL	HORIZ	Y/D = .70	
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.989	.116	.215	0.000	.989	.181	.258	0.000	.989	.328	.258	0.000
.967	.155	.194	.156	.967	.220	.237	.014	.967	.348	.237	.015
.945	.141	.172	.253	.945	.120	.215	.063	.945	.203	.215	.031
.923	.230	.151	.282	.923	.238	.194	.128	.923	.250	.194	.044
.902	.194	.129	.306	.902	.355	.172	.205	.902	.328	.172	.056
.880	.271	.108	.423	.880	.415	.151	.142	.880	.260	.151	.096
.858	.338	.086	.530	.858	.355	.129	.110	.858	.284	.129	.164
.836	.440	.065	.598	.836	.446	.108	.169	.836	.353	.108	.287
.814	.504	.043	.642	.814	.590	.086	.290	.814	.366	.086	.145
.792	.470	.022	.632	.792	.325	.065	.342	.792	.368	.065	.316
.770	.398	0.000	.700	.770	.184	.043	.284	.770	.400	.043	.346
.749	.604	-.022	.651	.749	.207	.022	.448	.749	.409	.022	.500
.727	.421	-.043	.588	.727	.371	0.000	.448	.727	.426	0.000	.456
.705	.457	-.065	.515	.705	.352	-.022	.534	.705	.363	-.022	.410
.683	.584	-.086	.433	.683	.310	-.043	.590	.683	.488	-.043	.343
.661	.700	-.108	.277	.661	.289	-.065	.529	.661	.439	-.065	.224
.639	.470	-.129	.194	.639	.439	-.086	.428	.639	.500	-.086	.369
.617	.462	-.151	.297	.617	.259	-.108	.387	.617	.346	-.108	.205
.596	.368	-.172	.117	.596	.310	-.129	.221	.596	.311	-.129	.164
.574	.291	-.194	.063	.574	.170	-.151	.119	.574	.228	-.151	.123
.552	.274	-.215	0.000	.552	.388	-.172	.137	.552	.225	-.172	.137
.530	.357	0.000	0.000	.530	.214	-.194	.081	.530	.208	-.194	.138
.508	.271	0.000	0.000	.508	.289	-.215	.063	.508	.297	-.215	.109
.486	.163	0.000	0.000	.486	.126	-.237	.025	.486	.223	-.237	.075
.464	.266	0.000	0.000	.464	.099	-.258	0.000	.464	.164	-.258	.046
.443	.064	0.000	0.000	.443	.063	-.280	.009	.443	.017	-.280	.005
.421	.044	0.000	0.000	.421	.138	0.000	0.000	.421	.032	-.301	.007
.399	.022	0.000	0.000	.399	.060	0.000	0.000	.399	.007	0.000	0.000
.377	.006	0.000	0.000	.377	.060	0.000	0.000	.377	.007	0.000	0.000
0.000	0.000	0.000	0.000	.355	.066	0.000	0.000	.355	.012	0.000	0.000
0.000	0.000	0.000	0.000	.333	.057	0.000	0.000	.333	.064	0.000	0.000
0.000	0.000	0.000	0.000	.311	.030	0.000	0.000	.311	.047	0.000	0.000
0.000	0.000	0.000	0.000	.290	.006	0.000	0.000	.290	.027	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.268	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.246	.025	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.224	0.000	0.000	0.000
MEAN	MEAN			MEAN	MEAN			MEAN	MEAN		
.268579	1.916045			.263384	1.956861			.253020	1.979926		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.015168	.010573			.021481	.015771			.020041	.040176		
VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B		
.019102	.013055			.011746	.026349			.017100	.027162		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.3062	.7646			.2405	.2218			.2154	.1837		

TABLE 4 - continued

LARGE NOZZLE DIAMETER = 1.882CM											
JET STRENGTH = 2.81 FROUDE NO. = 39.70											
STATION 1.00				STATION 3.00				STATION 5.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.770	0.000	.086	0.000	.880	0.000	.129	0.000	.923	.262	.215	0.000
.749	.046	.075	.154	.858	.123	.108	.179	.869	.440	.194	.013
.727	.203	.065	.343	.836	.230	.086	.523	.814	.767	.112	.031
.705	.429	.054	1.081	.814	.281	.065	1.037	.760	.754	.151	.107
.683	.646	.043	2.307	.792	.193	.043	1.461	.705	.945	.129	.196
.661	.905	.032	3.856	.770	.848	.022	1.621	.650	1.010	.108	.398
.639	1.154	.022	4.615	.749	1.011	0.000	1.800	.546	.764	.086	.498
.617	2.512	.011	6.100	.727	1.281	-.022	1.564	.541	.574	.065	.621
.596	3.774	0.000	6.084	.705	1.610	-.043	1.591	.486	.460	.043	.683
.574	4.673	-.011	5.368	.683	1.285	-.065	1.136	.432	.325	.022	.745
.552	5.195	-.022	4.169	.661	1.670	-.086	.580	.377	.144	0.000	.943
.530	6.100	-.032	3.538	.639	1.780	-.108	.250	.322	.132	-.022	1.010
.508	5.409	-.043	2.106	.617	1.709	-.129	.086	.268	.009	-.043	.870
.486	5.209	-.054	1.029	.596	1.800	-.151	.024	0.000	0.000	-.065	.739
.464	3.773	-.065	.488	.574	1.672	0.000	0.000	0.000	0.000	-.086	.590
.443	2.369	-.075	.133	.552	1.630	0.000	0.000	0.000	0.000	-.108	.474
.421	1.362	-.086	.005	.530	1.411	0.000	0.000	0.000	0.000	-.129	.367
.399	.739	0.000	0.000	.508	1.237	0.000	0.000	0.000	0.000	-.151	.271
.377	.474	0.000	0.000	.486	1.197	0.000	0.000	0.000	0.000	-.172	.145
.355	.613	0.000	0.000	.464	1.566	0.000	0.000	0.000	0.000	-.194	.027
.333	.719	0.000	0.000	.443	1.404	0.000	0.000	0.000	0.000	-.215	.004
.311	.120	0.000	0.000	.421	1.348	0.000	0.000	0.000	0.000	-.237	0.000
.290	.028	0.000	0.000	.399	1.031	0.000	0.000	0.000	0.000	0.000	0.000
.268	.028	0.000	0.000	.377	.785	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.355	.702	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.333	.452	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.311	.250	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.290	.135	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.268	.079	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.246	.044	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.224	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.431741		1.934437		.392347		1.943291		.305769		1.961300	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.004374		.003064		.013855		.009774		.017184		.021928	
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B	
.003727		.003278		.016199		.011915		.016734		.020652	
AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T	
1.9452		2.4721		.9262		.8451		.5142		.3969	

LARGE NOZZLE DIAMETER = 1.882CM											
JET STRENGTH = 2.81 FROUDE NO. = 39.70											
STATION 9.00				STATION 11.00				STATION 0.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.978	.498	.301	0.000	.978	.300	.344	0.000	.978	0.000	0.000	0.000
.923	.332	.280	.012	.923	.340	.323	.007	0.000	0.000	0.000	0.000
.869	.590	.258	.019	.869	.500	.301	.015	0.000	0.000	0.000	0.000
.814	.442	.237	.058	.814	.454	.280	.021	0.000	0.000	0.000	0.000
.760	.493	.215	.077	.760	.473	.258	.035	0.000	0.000	0.000	0.000
.705	.553	.194	.103	.705	.374	.237	.060	0.000	0.000	0.000	0.000
.650	.553	.172	.096	.650	.403	.215	.076	0.000	0.000	0.000	0.000
.596	.541	.151	.122	.596	.388	.194	.097	0.000	0.000	0.000	0.000
.541	.357	.129	.185	.541	.360	.172	.129	0.000	0.000	0.000	0.000
.486	.325	.108	.283	.486	.393	.151	.188	0.000	0.000	0.000	0.000
.432	.216	.086	.422	.432	.244	.129	.277	0.000	0.000	0.000	0.000
.377	.095	.065	.468	.377	.156	.108	.302	0.000	0.000	0.000	0.000
.322	.023	.043	.415	.322	.030	.086	.327	0.000	0.000	0.000	0.000
.268	.185	.022	.405	.268	.039	.065	.422	0.000	0.000	0.000	0.000
.213	.065	0.000	.518	.213	.042	.043	.461	0.000	0.000	0.000	0.000
.158	.032	-.022	.590	.158	.024	.022	.452	0.000	0.000	0.000	0.000
0.000	0.000	-.043	.504	0.000	.104	.022	.500	0.000	0.000	0.000	0.000
0.000	0.000	-.065	.472	0.000	.049	-.022	.437	0.000	0.000	0.000	0.000
0.000	0.000	-.086	.463	0.000	0.000	-.043	.453	0.000	0.000	0.000	0.000
0.000	0.000	-.108	.429	0.000	0.000	-.065	.387	0.000	0.000	0.000	0.000
0.000	0.000	-.129	.377	0.000	0.000	-.086	.343	0.000	0.000	0.000	0.000
0.000	0.000	-.151	.317	0.000	0.000	-.108	.357	0.000	0.000	0.000	0.000
0.000	0.000	-.172	.240	0.000	0.000	-.129	.259	0.000	0.000	0.000	0.000
0.000	0.000	-.194	.201	0.000	0.000	-.151	.193	0.000	0.000	0.000	0.000
0.000	0.000	-.215	.144	0.000	0.000	-.172	.145	0.000	0.000	0.000	0.000
0.000	0.000	-.237	.106	0.000	0.000	-.194	.106	0.000	0.000	0.000	0.000
0.000	0.000	-.258	.067	0.000	0.000	-.215	.078	0.000	0.000	0.000	0.000
0.000	0.000	-.280	.034	0.000	0.000	-.237	.048	0.000	0.000	0.000	0.000
0.000	0.000	-.301	.005	0.000	0.000	-.258	.034	0.000	0.000	0.000	0.000
0.000	0.000	-.323	.012	0.000	0.000	-.280	.024	0.000	0.000	0.000	0.000
0.000	0.000	-.344	0.000	0.000	0.000	-.301	.001	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.323	.001	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.344	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.291756		1.945041		.288097		1.937121		0.000000		0.000000	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.031389		.040882		.030252		.045091		0.000000		0.000000	
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B	
.028845		.040520		.030714		.042961		0.000000		0.000000	
AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T	
.3306		.2305		.2524		.1889		0.0000		0.0000	

TABLE 5 - DIFFUSION DATA - SMOOTH BOUNDARY - SALT

CONCENTRATION DISTRIBUTIONS
INJECTION CONCENTRATION = 2500 MG. PER LITER

VARIANCE A USES BASIC DEFINITION
VARIANCE B USES REFLECTION PRINCIPLE

TABLE 5 - continued

SMALL NOZZLE DIAMETER = .468CM															
JET STRENGTH = .96				STATION 1.00				STATION 0.00				STATION 0.00			
FROUDE NO. = INF.				STATION 1.00				STATION 0.00				STATION 0.00			
VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C
Y/D	C	Z/HW		Y/D	C	Z/HW		Y/D	C	Z/HW		Y/D	C	Z/HW	
.607	0.000	0.000	0.000	.607	0.000	0.000	0.000	.607	0.000	0.000	0.000	.607	0.000	0.000	0.000
.595	.715	0.000	0.000	.607	.906	0.000	0.000	.607	.906	0.000	0.000	.607	.906	0.000	0.000
.563	6.120	0.000	0.000	.545	3.170	0.000	0.000	.607	.906	0.000	0.000	.607	.906	0.000	0.000
.541	22.156	0.000	0.000	.563	9.509	0.000	0.000	.607	.906	0.000	0.000	.607	.906	0.000	0.000
.519	47.895	0.000	0.000	.541	21.566	0.000	0.000	.607	.906	0.000	0.000	.607	.906	0.000	0.000
.497	62.000	0.000	0.000	.519	26.491	0.000	0.000	.607	.906	0.000	0.000	.607	.906	0.000	0.000
.475	49.919	0.000	0.000	.497	30.000	0.000	0.000	.607	.906	0.000	0.000	.607	.906	0.000	0.000
.454	22.156	0.000	0.000	.475	26.717	0.000	0.000	.607	.906	0.000	0.000	.607	.906	0.000	0.000
.432	5.450	0.000	0.000	.454	21.226	0.000	0.000	.607	.906	0.000	0.000	.607	.906	0.000	0.000
.410	2.189	0.000	0.000	.432	10.472	0.000	0.000	.607	.906	0.000	0.000	.607	.906	0.000	0.000
.388	.089	0.000	0.000	.410	3.509	0.000	0.000	.607	.906	0.000	0.000	.607	.906	0.000	0.000
0.000	0.000	0.000	0.000	.388	1.415	0.000	0.000	.607	.906	0.000	0.000	.607	.906	0.000	0.000
0.000	0.000	0.000	0.000	.366	0.000	0.000	0.000	.607	.906	0.000	0.000	.607	.906	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.460584	0.000000	0.000000	0.000000	.460018	0.000000	0.000000	0.000000	.460000	0.000000	0.000000	0.000000	.460000	0.000000	0.000000	0.000000
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.000782	0.000000	0.000000	0.000000	.001468	0.000000	0.000000	0.000000	.000000	0.000000	0.000000	0.000000	.000000	0.000000	0.000000	0.000000
VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B
.000792	0.000000	0.000000	0.000000	.001699	0.000000	0.000000	0.000000	.000000	0.000000	0.000000	0.000000	.000000	0.000000	0.000000	0.000000
AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C
19.8816	0.0000			11.9216	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

SMALL NOZZLE DIAMETER = .468CM															
JET STRENGTH = 2.30				STATION 2.00				STATION 3.00				STATION 4.00			
FROUDE NO. = INF.				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C
Y/D	C	Z/HW		Y/D	C	Z/HW		Y/D	C	Z/HW		Y/D	C	Z/HW	
.628	0.000	.065	0.000	.650	0.000	.097	0.000	.770	0.000	.129	0.000	.770	0.000	.172	0.000
.607	2.025	.054	2.105	.628	3.084	.086	.640	.715	1.192	.118	.429	.716	1.160	.151	.535
.585	15.392	.043	4.662	.607	8.371	.075	1.599	.661	2.810	.108	1.429	.661	2.611	.129	1.428
.563	33.215	.032	11.128	.585	17.035	.065	4.371	.607	7.920	.097	10.714	.607	9.477	.108	2.796
.541	55.089	.022	29.271	.563	29.371	.054	10.766	.552	23.674	.086	6.000	.552	15.957	.086	11.661
.519	66.470	.011	50.827	.541	25.259	.043	18.548	.497	31.000	.075	10.571	.497	23.500	.065	10.887
.497	80.000	0.000	80.000	.519	34.217	.032	25.051	.443	29.552	.065	12.857	.443	20.309	.043	19.276
.475	74.595	-.011	71.579	.497	42.000	.022	31.020	.388	20.610	.054	21.143	.388	16.053	.022	20.704
.454	60.557	-.022	53.233	.475	40.972	.011	42.000	.333	12.604	.043	24.429	.333	11.025	0.000	23.500
.432	37.671	-.032	30.677	.454	30.252	0.000	41.893	.279	6.473	.032	21.286	.279	5.996	-.022	20.942
.410	18.875	-.043	14.586	.432	21.881	-.011	38.695	.224	4.258	.022	27.429	.224	2.805	-.043	17.848
.388	3.443	-.054	8.120	.410	13.051	-.022	41.254	.169	2.640	.011	25.857	.169	1.934	-.054	10.887
.366	0.000	-.065	2.256	.388	8.664	-.032	35.711	.115	.170	0.000	31.000	.115	.774	-.065	9.281
0.000	0.000	-.075	.150	.366	.734	-.043	25.797	0.000	0.000	-.011	26.429	.060	.193	-.075	3.808
0.000	0.000	0.000	0.000	.344	0.000	-.054	20.787	0.000	0.000	-.022	24.286	0.000	0.000	-.075	1.309
0.000	0.000	0.000	0.000	0.000	0.000	-.065	15.350	0.000	0.000	-.032	22.000	0.000	0.000	-.075	.357
0.000	0.000	0.000	0.000	0.000	0.000	-.075	7.462	0.000	0.000	-.043	25.286	0.000	0.000	-.075	.059
0.000	0.000	0.000	0.000	0.000	0.000	-.086	4.477	0.000	0.000	-.054	19.571	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.097	.213	0.000	0.000	-.065	17.143	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.108	.426	0.000	0.000	-.075	13.857	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.118	0.000	0.000	0.000	-.086	12.143	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.097	8.714	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.108	6.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.118	2.714	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.129	.286	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.662579	1.945694	0.000000	0.000000	.657776	1.952982	0.000000	0.000000	.502014	1.945694	0.000000	0.000000	.502364	1.935201	0.000000	0.000000
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.001101	0.000000	0.000000	0.000000	.002631	0.000000	0.000000	0.000000	.000406	0.000000	0.000000	0.000000	.010856	0.000000	0.000000	0.000000
VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B
.000203	0.000000	0.000000	0.000000	.002745	0.000000	0.000000	0.000000	.000445	0.000000	0.000000	0.000000	.000989	0.000000	0.000000	0.000000
AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C
34.7887	25.5424			14.3860	17.4315			10.9928	14.8629			7.9853	9.1340		

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TABLE 5 - continued

SMALL NOZZLE DIAMETER = .446CM											
JET STRENGTH = 4.30				FROUDE NO. = INF.							
STATION 4.00				STATION 6.00				STATION 7.00			
VERTICAL	HORIZ	Y/D = .44	VERTICAL	HORIZ	Y/D = .44	VERTICAL	HORIZ	Y/D = .44	VERTICAL	HORIZ	Y/D = .44
Y/D	C	Z/HW	Y/D	C	Z/HW	Y/D	C	Z/HW	Y/D	C	Z/HW
.825	0.000	.172	0.000	.840	0.000	.215	0.000	.840	0.000	.258	0.000
.770	.531	.151	.937	.425	.024	.194	.631	.825	.823	.237	3.002
.716	1.843	.129	4.462	.770	6.498	.172	4.716	.770	1.235	.215	.635
.661	4.713	.108	2.850	.716	4.953	.151	5.208	.716	3.230	.194	1.175
.607	14.240	.086	4.200	.661	11.379	.129	8.587	.661	5.573	.172	7.186
.552	21.331	.065	6.600	.607	12.466	.108	10.135	.607	8.170	.151	5.714
.497	22.039	.043	10.987	.552	14.463	.086	10.945	.552	13.427	.129	7.129
.443	23.917	.022	19.987	.497	16.169	.065	18.406	.497	17.575	.108	8.543
.388	31.500	0.000	25.350	.443	18.954	.043	25.092	.443	19.507	.086	7.735
.333	28.311	-.022	31.500	.388	26.500	.022	26.500	.388	22.800	.065	12.035
.279	16.193	-.043	28.462	.333	22.248	0.000	25.867	.333	18.815	.043	13.305
.224	9.815	-.065	23.850	.279	17.667	-.022	22.312	.279	9.627	.022	20.607
.169	7.228	-.086	20.175	.224	12.966	-.043	26.218	.224	8.930	0.000	22.800
.115	4.252	-.108	12.937	.169	9.762	-.065	20.799	.169	5.573	-.022	20.635
.060	2.197	-.129	8.850	.115	7.067	-.086	18.129	.115	3.683	-.043	19.798
.005	.567	-.151	7.575	.060	4.701	-.108	13.021	.060	2.755	-.065	14.777
0.000	0.000	-.172	4.012	.005	2.605	-.129	9.291	.005	1.362	-.086	11.083
0.000	0.000	-.194	2.062	0.000	0.000	-.151	5.455	0.000	0.000	-.108	9.639
0.000	0.000	-.215	1.050	0.000	0.000	-.172	2.921	0.000	0.000	-.129	6.955
0.000	0.000	-.237	.112	0.000	0.000	-.194	2.076	0.000	0.000	-.151	5.224
0.000	0.000	-.258	0.000	0.000	0.000	-.215	.246	0.000	0.000	-.172	3.752
0.000	0.000	0.000	0.000	0.000	0.000	-.237	0.000	0.000	0.000	-.194	2.799
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.215	1.558
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.237	1.299
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.258	.173
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.280	.058
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.541459	2.004591	.536070	1.946502	.538186	1.937127	.538186	1.937127	.538186	1.937127	.538186	1.937127
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.016255	.017259	.028386	.023941	.020606	.034553	.020606	.034553	.020606	.034553	.020606	.034553
VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B
.014238	.012998	.021000	.025898	.015046	.023348	.015046	.023348	.015046	.023348	.015046	.023348
AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C
11.7948	10.2839	11.4014	11.6615	8.2874	8.0621	8.2874	8.0621	8.2874	8.0621	8.2874	8.0621

SMALL NOZZLE DIAMETER = .446CM											
JET STRENGTH = 6.26				FROUDE NO. = INF.							
STATION 1.00				STATION 2.00				STATION 3.00			
VERTICAL	HORIZ	Y/D = .44	VERTICAL	HORIZ	Y/D = .44	VERTICAL	HORIZ	Y/D = .44	VERTICAL	HORIZ	Y/D = .44
Y/D	C	Z/HW	Y/D	C	Z/HW	Y/D	C	Z/HW	Y/D	C	Z/HW
.672	0.000	.086	0.000	.694	0.000	.129	0.000	.803	0.000	.172	0.000
.650	7.057	.075	2.398	.672	9.275	.118	.362	.781	1.788	.151	2.252
.628	19.113	.065	10.592	.650	19.691	.108	2.739	.760	5.631	.129	4.075
.607	36.168	.054	19.185	.628	31.249	.097	6.049	.739	7.598	.108	8.150
.585	62.926	.043	44.563	.607	54.650	.086	9.929	.716	9.475	.086	25.952
.563	107.622	.032	92.726	.585	75.055	.075	17.461	.694	14.927	.065	40.214
.541	152.023	.022	130.297	.563	89.477	.065	40.741	.672	27.441	.043	61.448
.519	200.541	.011	189.457	.541	91.036	.054	63.225	.650	25.475	.022	61.340
.497	239.650	0.000	247.204	.519	102.737	.043	75.209	.628	37.363	0.000	80.000
.475	252.000	-.011	257.000	.497	112.868	.032	89.817	.607	44.335	-.022	74.960
.454	238.180	-.022	219.826	.475	122.000	.022	98.490	.585	52.559	-.043	65.094
.432	202.306	-.032	163.470	.454	112.868	.011	112.870	.563	63.374	-.065	48.579
.410	151.200	-.043	95.932	.432	102.451	0.000	122.000	.541	67.128	-.086	30.885
.388	108.798	-.054	39.369	.410	92.891	-.011	113.098	.519	69.631	-.108	17.265
.366	68.807	-.065	14.389	.388	81.476	-.022	105.318	.497	76.872	-.129	7.399
.344	39.109	-.075	5.995	.366	69.062	-.032	100.316	.475	80.000	-.151	2.466
.322	19.995	-.086	0.000	.344	54.650	-.043	77.948	.454	78.927	-.172	.214
.301	5.881	0.000	0.000	.322	32.105	-.054	63.340	.432	78.838	0.000	0.000
.279	0.000	0.000	0.000	.301	19.120	-.065	47.476	.410	76.603	0.000	0.000
0.000	0.000	0.000	0.000	.279	6.278	-.075	29.673	.388	70.615	0.000	0.000
0.000	0.000	0.000	0.000	.257	.143	-.086	17.347	.366	66.145	0.000	0.000
0.000	0.000	0.000	0.000	.235	0.000	-.097	7.761	.344	62.570	0.000	0.000
0.000	0.000	0.000	0.000	.213	0.000	-.108	0.000	.322	52.916	0.000	0.000
0.000	0.000	0.000	0.000	.191	0.000	-.118	.228	.301	44.782	0.000	0.000
0.000	0.000	0.000	0.000	.169	0.000	-.129	0.000	.279	37.899	0.000	0.000
0.000	0.000	0.000	0.000	.147	0.000	0.000	0.000	.257	28.905	0.000	0.000
0.000	0.000	0.000	0.000	.125	0.000	0.000	0.000	.235	24.134	0.000	0.000
0.000	0.000	0.000	0.000	.103	0.000	0.000	0.000	.213	15.732	0.000	0.000
0.000	0.000	0.000	0.000	.081	0.000	0.000	0.000	.191	10.458	0.000	0.000
0.000	0.000	0.000	0.000	.059	0.000	0.000	0.000	.169	6.883	0.000	0.000
0.000	0.000	0.000	0.000	.037	0.000	0.000	0.000	.147	2.542	0.000	0.000
0.000	0.000	0.000	0.000	.015	0.000	0.000	0.000	.125	.089	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.480566	1.948119	.479299	1.941470	.488806	1.948066	.488806	1.948066	.488806	1.948066	.488806	1.948066
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.003563	.002483	.006202	.005147	.003150	.002130	.003150	.002130	.003150	.002130	.003150	.002130
VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B
.003670	.002427	.006499	.005669	.003246	.002136	.003246	.002136	.003246	.002136	.003246	.002136
AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C
80.7040	88.8471	60.4802	48.0559	38.7402	31.1938	38.7402	31.1938	38.7402	31.1938	38.7402	31.1938

TABLE 5 - continued

SMALL NOZZLE DIAMETER = .468CM											
JET STRENGTH = 6.26				STATION 6.00				STATION 7.00			
FROUDE NO. = INF.				STATION 8.00				STATION 9.00			
VERTICAL	C	HORIZ	Y/D = .44	VERTICAL	C	HORIZ	Y/D = .44	VERTICAL	C	HORIZ	Y/D = .44
Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW	
.989	0.000	.215	0.000	.989	0.000	.258	0.000	.989	0.000	.301	0.000
.925	.249	.194	1.610	.925	1.091	.237	.732	.925	1.189	.234	.542
.770	2.153	.172	1.859	.770	5.603	.215	3.927	.770	4.681	.248	2.438
.716	16.759	.151	7.204	.716	10.114	.194	5.790	.716	18.114	.217	2.854
.661	27.713	.129	15.266	.661	17.099	.172	18.568	.661	20.194	.215	3.508
.607	34.080	.108	20.670	.607	21.246	.151	11.381	.607	12.804	.194	6.184
.552	31.365	.086	30.790	.552	32.015	.129	20.299	.552	17.281	.172	12.368
.497	42.131	.065	30.104	.497	28.159	.108	20.565	.497	16.656	.151	9.811
.443	47.000	.043	42.540	.443	11.834	.086	20.565	.443	28.315	.129	12.070
.388	38.480	.022	40.825	.388	39.000	.065	30.814	.388	27.691	.108	20.692
.333	34.429	0.000	42.000	.333	16.817	.043	31.346	.333	32.063	.086	26.459
.279	31.705	-.022	39.710	.279	12.233	.022	34.940	.279	28.628	.065	26.876
.224	24.008	-.043	41.768	.224	25.685	0.000	39.000	.224	33.000	.043	27.351
.169	15.678	-.065	31.792	.169	14.864	-.022	36.671	.169	22.089	.022	29.551
.115	6.179	-.086	24.646	.115	15.462	-.043	33.343	.115	15.199	0.000	33.000
.060	1.498	-.108	20.069	.060	4.604	-.065	31.147	.060	4.161	-.022	28.659
.005	.187	-.129	11.493	.005	3.347	-.086	27.287	.005	5.413	-.043	25.984
0.000	0.000	-.151	6.432	0.000	0.000	-.108	17.770	0.000	3.852	-.065	25.449
0.000	0.000	-.172	4.031	0.000	0.000	-.129	12.312	0.000	0.000	-.086	19.919
0.000	0.000	-.194	1.372	0.000	0.000	-.151	7.920	0.000	0.000	-.108	17.778
0.000	0.000	-.215	.172	0.000	0.000	-.172	4.326	0.000	0.000	-.129	13.676
0.000	0.000	0.000	0.000	0.000	0.000	-.194	3.860	0.000	0.000	-.151	13.735
0.000	0.000	0.000	0.000	0.000	0.000	-.215	2.729	0.000	0.000	-.172	9.157
0.000	0.000	0.000	0.000	0.000	0.000	-.237	1.398	0.000	0.000	-.194	5.649
0.000	0.000	0.000	0.000	0.000	0.000	-.258	.200	0.000	0.000	-.215	4.103
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.237	2.795
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.258	4.162
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.280	1.724
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.301	.059
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.323	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.344	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.511929		1.934532		.552490		1.918902		.509863		1.936611	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.021129		.021761		.026577		.032681		.036000		.043769	
VARIANCE R		VARIANCE R		VARIANCE R		VARIANCE R		VARIANCE R		VARIANCE R	
.022931		.022837		.028470		.031557		.033449		.038040	
AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C	
20.9941		20.3511		19.5043		16.6755		16.9164		12.4903	

SMALL NOZZLE DIAMETER = .468CM											
JET STRENGTH = 6.26				STATION 0.00				STATION 0.00			
FROUDE NO. = INF.				STATION 0.00				STATION 0.00			
VERTICAL	C	HORIZ	Y/D = .44	VERTICAL	C	HORIZ	Y/D = .00	VERTICAL	C	HORIZ	Y/D = .00
Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW	
.989	.243	.301	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.934	1.376	.280	1.315	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.880	3.877	.258	3.042	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.825	4.898	.237	1.562	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.770	4.898	.215	3.206	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.716	11.619	.194	4.686	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.661	14.857	.172	8.385	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.607	17.853	.151	10.605	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.552	20.363	.129	5.179	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.497	20.686	.108	19.319	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.443	25.140	.086	22.607	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.388	23.804	.065	19.730	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.333	22.630	.043	22.607	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.279	26.809	.022	25.154	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.224	20.170	0.000	24.800	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.169	15.678	-.022	17.839	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.115	11.416	-.043	24.525	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.060	7.449	-.065	22.525	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.005	2.105	-.086	19.483	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.108	17.593	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.129	11.501	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.151	13.151	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.172	10.605	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.194	8.550	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.215	6.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.237	4.521	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.258	2.548	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.280	.984	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.301	.493	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.532988		1.945976		0.000000		0.000000		0.000000		0.000000	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.033692		.047421		0.000000		0.000000		0.000000		0.000000	
VARIANCE R		VARIANCE R		VARIANCE R		VARIANCE R		VARIANCE R		VARIANCE R	
.035404		.042920		0.000000		0.000000		0.000000		0.000000	
AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C	
13.3680		11.5262		0.0000		0.0000		0.0000		0.0000	

TABLE 5 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = .64								FROUDE NO. = INF.							
STATION 5.00				STATION 6.00				STATION 7.00				STATION 8.00			
VERTICAL	HORIZ	Y/D = .47		VERTICAL	HORIZ	Y/D = .47		VERTICAL	HORIZ	Y/D = .47		VERTICAL	HORIZ	Y/D = .47	
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.875	0.000	.258	0.000	.945	0.000	.301	0.000	.930	0.000	.301	0.000	.930	0.000	.301	0.000
.821	1.195	.277	.149	.910	.466	.280	.396	.868	.315	.280	.493	.868	.204	.280	.453
.766	3.183	.215	.157	.875	2.623	.258	.641	.805	.574	.258	.644	.805	.885	.258	.762
.711	3.040	.194	.626	.821	1.927	.237	.810	.743	.870	.237	1.094	.743	1.209	.237	.947
.657	3.720	.172	1.191	.766	4.265	.215	.942	.681	2.167	.215	1.630	.681	1.464	.215	1.338
.602	6.152	.151	.774	.711	4.951	.194	1.131	.619	3.481	.194	1.759	.619	2.894	.194	1.668
.548	8.083	.129	3.007	.657	5.466	.172	1.357	.556	4.667	.172	2.231	.556	4.817	.172	1.050
.493	9.400	.108	1.966	.602	7.108	.151	1.867	.444	4.315	.151	5.342	.444	4.477	.151	2.162
.438	8.405	.086	3.843	.548	7.500	.129	2.035	.432	6.500	.129	4.762	.432	5.191	.129	2.862
.384	8.727	.065	4.677	.493	7.010	.108	4.541	.369	4.759	.108	5.363	.369	5.600	.108	2.203
.329	5.615	.043	8.102	.438	4.363	.086	6.237	.307	3.593	.086	5.749	.307	5.396	.086	3.974
.274	3.791	.022	7.357	.384	4.118	.065	5.785	.245	1.667	.065	4.827	.245	4.562	.065	4.674
.220	1.538	0.000	6.136	.329	3.456	.043	7.500	.183	2.648	.043	5.835	.183	3.557	.043	4.700
.165	2.146	-.022	6.404	.274	2.353	.022	6.595	.120	1.852	.022	6.500	.120	3.387	.022	4.982
.110	1.073	-.043	6.643	.220	1.789	0.000	6.595	.058	1.259	0.000	5.106	.058	2.774	0.000	5.600
.054	0.000	-.065	9.800	.165	.760	-.022	5.616	0.000	0.000	-.022	4.290	0.000	0.000	-.022	4.941
0.000	0.000	-.086	5.749	.110	.123	-.043	7.310	0.000	0.000	-.043	4.140	0.000	0.000	-.043	4.591
0.000	0.000	-.108	5.391	0.000	0.000	-.065	5.254	0.000	0.000	-.065	4.591	0.000	0.000	-.065	3.809
0.000	0.000	-.129	4.617	0.000	0.000	-.086	6.219	0.000	0.000	-.086	4.705	0.000	0.000	-.086	4.494
0.000	0.000	-.151	3.157	0.000	0.000	-.108	5.107	0.000	0.000	-.108	4.955	0.000	0.000	-.108	3.644
0.000	0.000	-.172	1.847	0.000	0.000	-.129	4.391	0.000	0.000	-.129	3.883	0.000	0.000	-.129	3.582
0.000	0.000	-.194	.864	0.000	0.000	-.151	3.675	0.000	0.000	-.151	3.046	0.000	0.000	-.151	3.562
0.000	0.000	-.215	.626	0.000	0.000	-.172	2.883	0.000	0.000	-.172	2.531	0.000	0.000	-.172	2.924
0.000	0.000	-.237	.298	0.000	0.000	-.194	2.111	0.000	0.000	-.194	1.073	0.000	0.000	-.194	2.224
0.000	0.000	-.258	.089	0.000	0.000	-.215	1.413	0.000	0.000	-.215	1.073	0.000	0.000	-.215	1.709
0.000	0.000	0.000	0.000	0.000	0.000	-.237	.867	0.000	0.000	-.237	.150	0.000	0.000	-.237	.968
0.000	0.000	0.000	0.000	0.000	0.000	-.258	.433	0.000	0.000	-.258	.043	0.000	0.000	-.258	1.400
0.000	0.000	0.000	0.000	0.000	0.000	-.280	.226	0.000	0.000	-.280	.107	0.000	0.000	-.280	.535
0.000	0.000	0.000	0.000	0.000	0.000	-.301	.019	0.000	0.000	0.000	0.000	0.000	0.000	-.301	.247
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.323	.062
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.344	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.477466	1.971990		.399197	1.962950		.522348	1.907667		.564772		1.970165				
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A		VARIANCE A				
.021095	.030018		.026418	.043263		.026460	.049230		.029864		.057714				
VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B		VARIANCE B				
.018414	.020553		.025662	.040651		.017707	.048431		.033434		.050577				
AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C		AVERAGE C				
4.1668	3.3826		3.5453	3.1372		2.5778	3.0753		3.0945		2.4440				

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = .64								FROUDE NO. = INF.							
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	HORIZ	Y/D = .47		VERTICAL	HORIZ	Y/D = .47		VERTICAL	HORIZ	Y/D = .47		VERTICAL	HORIZ	Y/D = 0.00	
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.625	0.000	.054	0.000	.668	0.000	.129	.053	.777	0.000	.172	0.000	.799	0.000	.945	0.000
.603	3.374	.043	1.859	.646	2.709	.118	1.263	.755	.569	.151	.447	.777	.511	.492	1.185
.581	9.886	.032	3.983	.624	4.315	.108	1.842	.733	1.177	.129	4.956	.755	1.346	.038	3.844
.560	17.890	.022	5.842	.602	5.318	.097	2.947	.711	1.708	.108	5.537	.733	2.321	.585	5.189
.538	25.658	.011	8.497	.580	7.526	.086	4.053	.690	1.366	.086	8.350	.711	2.738	.613	4.837
.516	35.701	0.000	25.226	.558	8.830	.075	5.263	.668	1.215	.065	10.181	.690	4.827	.678	5.702
.494	47.000	-.011	33.989	.537	15.955	.065	11.579	.646	1.936	.043	13.351	.668	3.388	.624	6.662
.472	43.626	-.022	40.096	.515	19.969	.054	15.368	.624	3.117	.022	10.851	.646	4.317	.770	5.862
.450	38.447	-.032	47.000	.493	20.571	.043	16.316	.602	3.720	0.000	14.959	.624	5.245	.617	8.873
.428	28.887	-.043	45.672	.471	29.000	.032	14.526	.580	6.718	-.022	13.664	.602	6.823	.863	9.994
.407	23.853	-.054	32.578	.449	22.578	.022	25.316	.558	8.957	-.043	16.700	.580	6.266	.410	12.044
.385	17.341	-.065	32.395	.427	21.673	.011	29.000	.537	7.515	-.065	13.664	.558	8.633	.956	11.275
.363	13.574	-.075	18.455	.405	15.855	0.000	25.579	.515	8.957	-.086	9.109	.537	10.583	.503	12.300
.341	9.337	-.086	7.302	.384	13.547	-.011	23.842	.493	16.700	-.108	6.475	.515	12.300	.049	9.962
.319	4.394	-.097	2.655	.362	12.042	-.022	22.842	.471	13.018	-.129	4.956	.493	11.836	.596	7.527
.297	0.000	-.108	.133	.340	9.934	-.032	22.684	.449	10.703	-.151	2.813	.471	9.190	.142	6.054
0.000	0.000	0.000	0.000	.318	6.422	-.043	23.842	.427	13.474	-.172	.938	.449	10.908	.689	3.748
0.000	0.000	0.000	0.000	.296	3.612	-.054	21.368	.405	10.893	-.194	.714	.427	7.751	.235	2.530
0.000	0.000	0.000	0.000	.274	1.204	-.065	11.053	.384	10.134	0.000	0.000	.405	8.540	.781	1.505
0.000	0.000	0.000	0.000	.252	.100	-.075	13.895	.362	9.868	0.000	0.000	.384	7.658	.328	1.057
0.000	0.000	0.000	0.000	.231	0.000	-.086	5.947	.340	6.944	0.000	0.000	.362	5.384	.874	.192
0.000	0.000	0.000	0.000	0.000	0.000	-.097	3.842	.318	5.655	0.000	0.000	.340	4.874	.421	.064
0.000	0.000	0.000	0.000	0.000	0.000	-.108	2.211	.296	4.023	0.000	0.000	.318	3.481	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.118	1.053	.274	1.518	0.000	0.000	.296	2.831	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.129	0.000	.252	.607	0.000	0.000	.274	2.228	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.231	.228	0.000	0.000	.252	1.532	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.209	.038	0.000	0.000	.231	.603	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.209	.371	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.187	.139	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.486459	2.007443		.493491	1.944110		.449067	1.955110		.440336		23.180547				
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A		VARIANCE A				
.007266	.002741		.005217	.000903		.000247	.019573		.011351		4.163442				
VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B		VARIANCE B				
.000293	.000290		.000362	.000776		.000187	.018479		.000939		3.107670				
AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C		AVERAGE C				
19.47348	19.1020		10.5029	12.2274		5.6833	7.6480		5.0560		5.4730				

TABLE 5 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 2.20								FROUDE NO. = INF.							
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.668	0.000	.006	0.000	.640	0.000	.129	0.000	.755	.134	.172	0.000	.766	0.000	.215	0.000
.646	1.105	.075	0.000	.668	2.666	.118	3.872	.733	1.138	.151	.142	.711	1.892	.194	.440
.624	18.042	.065	5.071	.646	3.480	.108	5.020	.711	3.145	.129	.447	.657	3.627	.172	2.831
.602	22.079	.054	11.244	.624	8.094	.097	6.167	.690	4.216	.108	.830	.602	10.407	.151	2.328
.580	31.566	.043	30.203	.602	15.254	.086	9.752	.668	6.090	.086	9.004	.580	30.983	.129	4.341
.558	57.440	.032	44.061	.580	25.682	.075	17.784	.646	9.302	.065	16.794	.558	38.000	.108	8.053
.537	94.353	.022	91.916	.558	39.535	.065	20.222	.624	14.655	.043	31.652	.537	37.054	.086	21.705
.515	124.021	.011	118.388	.537	49.030	.054	29.257	.602	31.519	.022	46.742	.515	25.859	.065	24.851
.493	164.375	0.000	153.000	.515	60.237	.043	39.870	.580	30.800	0.000	51.000	.493	22.075	.043	35.358
.471	153.000	-.011	146.827	.493	69.731	.032	60.453	.558	35.802	-.022	51.014	.471	13.245	.022	36.553
.449	137.993	-.022	128.104	.471	70.354	.022	73.000	.537	39.883	-.043	43.805	.449	7.884	0.000	38.000
.427	104.702	-.032	72.973	.449	71.000	.011	67.263	.515	45.971	-.065	31.645	.427	4.021	-.022	16.616
.405	86.246	-.043	39.022	.427	65.994	0.000	71.136	.493	50.457	-.086	18.518	.405	2.286	-.043	34.288
.384	63.677	-.054	22.707	.405	52.454	-.011	60.666	.471	53.000	-.108	13.090	.384	0.000	-.065	27.493
.362	46.917	-.065	10.141	.384	37.356	-.022	56.077	.449	50.591	-.129	7.790	.362	0.000	-.086	16.629
.340	33.291	-.075	1.543	.362	24.904	-.032	49.334	.427	50.792	-.151	3.320	.340	0.000	-.108	16.232
.318	18.904	-.086	0.000	.340	14.475	-.043	40.014	.405	41.824	-.172	.064	.318	0.000	-.129	8.808
.296	6.900	0.000	0.000	.318	7.004	-.054	37.145	.384	37.207	-.194	.647	.296	0.000	-.151	5.788
.274	1.345	0.000	0.000	.296	2.490	-.065	26.676	.362	31.519	0.000	0.000	.274	0.000	-.172	3.347
0.000	0.000	0.000	0.000	.274	0.000	-.075	21.656	.340	25.898	0.000	0.000	.252	0.000	-.194	1.762
0.000	0.000	0.000	0.000	.252	0.000	-.086	12.191	.318	17.600	0.000	0.000	.230	0.000	-.215	1.126
0.000	0.000	0.000	0.000	0.000	0.000	-.097	7.601	.296	13.116	0.000	0.000	.208	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.108	5.106	.274	9.569	0.000	0.000	.186	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.119	1.864	.252	5.822	0.000	0.000	.164	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.129	0.000	.230	3.279	0.000	0.000	.142	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.209	1.338	0.000	0.000	.120	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.187	0.000	0.000	0.000	.100	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.486421	1.944641			.482959	1.939761			.486997	1.967645			.519054	1.951086		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.003843	.002326			.004160	.007469			.008101	.010315			.011418	.018582		
VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B		
.003550	.002281			.004619	.006773			.008557	.010773			.010730	.020654		
AVERAGE C	AVERAGE C			AVERAGE C	AVERAGE C			AVERAGE C	AVERAGE C			AVERAGE C	AVERAGE C		
60.1451	51.7176			29.6106	28.9132			22.7600	18.3975			14.0951	15.6476		

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = .64								FROUDE NO. = INF.							
STATION 9.00				STATION 0.00				STATION 0.00				STATION 0.00			
VERTICAL	HORIZ	Y/D=	C	VERTICAL	HORIZ	Y/D=0.00	C	VERTICAL	HORIZ	Y/D=0.00	C	VERTICAL	HORIZ	Y/D=0.00	C
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.985	0.000	.344	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.930	.632	.323	.245	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.875	1.035	.301	.522	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.821	1.597	.280	.881	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.766	2.264	.258	1.549	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.711	3.317	.237	2.104	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.657	3.793	.215	3.245	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.602	4.493	.194	3.490	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.548	4.317	.172	2.952	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.493	4.861	.151	3.849	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.439	5.300	.129	4.322	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.384	2.878	.108	4.485	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.329	1.702	.086	4.093	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.274	2.374	.065	4.631	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.220	1.790	.043	4.338	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.165	1.264	.022	4.778	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.110	.702	0.000	5.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.056	.369	-.022	4.664	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.043	4.044	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.065	3.620	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.086	2.838	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.108	3.164	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.129	2.560	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.151	2.293	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.172	1.712	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.194	1.288	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.215	.978	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.237	1.158	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.258	.848	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.280	.995	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.301	.294	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.323	.098	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.344	.065	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN		MEAN	MEAN		MEAN	MEAN	MEAN	MEAN		MEAN	MEAN	MEAN		MEAN
.479360	1.888899		0.000000	0.000000		0.000000	0.000000	0.000000	0.000000		0.000000	0.000000	0.000000		0.000000
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A	VARIANCE A		VARIANCE A
.070427	.064492		0.000000	0.000000		0.000000	0.000000	0.000000	0.000000		0.000000	0.000000	0.000000		0.000000
VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B	VARIANCE B		VARIANCE B
.025437	.065112		0.000000	0.000000		0.000000	0.000000	0.000000	0.000000		0.000000	0.000000	0.000000		0.000000
AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C	AVERAGE C		AVERAGE C
2.3643	2.4664		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

TABLE 5 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM JET STRENGTH = 2.20 FROUDE NO. = INF.															
STATION 5.00				STATION 6.00				STATION 7.00				STATION 8.00			
VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C
Y/D	Z/HW			Y/D	Z/HW			Y/D	Z/HW			Y/D	Z/HW		
.875	0.000	.215	0.000	.875	.029	.258	0.000	.930	0.000	.301	.031	.985	.049	.301	0.000
.821	1.406	.194	.675	.821	.809	.217	.231	.875	.525	.240	.250	.930	1.581	.240	.403
.766	2.929	.172	2.763	.766	1.733	.215	2.891	.821	1.444	.258	.530	.875	3.138	.258	.657
.711	4.854	.151	4.237	.711	3.697	.194	4.447	.766	2.047	.217	1.310	.821	2.895	.217	2.926
.657	9.841	.129	10.684	.657	11.121	.172	1.471	.711	4.331	.215	2.028	.766	3.795	.215	4.495
.602	14.762	.108	14.491	.602	9.762	.151	5.715	.657	9.764	.194	4.056	.711	7.905	.194	4.707
.549	21.197	.086	17.193	.549	21.018	.129	6.872	.602	12.808	.172	4.961	.657	7.492	.172	5.894
.493	21.900	.065	20.447	.493	22.758	.108	5.839	.549	13.751	.151	5.647	.602	9.049	.151	8.163
.438	28.000	.043	24.807	.438	23.711	.086	13.124	.493	20.000	.129	6.984	.549	12.551	.129	11.703
.384	22.025	.022	27.018	.384	24.000	.065	16.611	.438	18.149	.108	11.451	.493	8.246	.108	9.435
.329	20.854	0.000	24.000	.329	19.523	.043	20.202	.384	16.378	.086	15.070	.438	13.330	.086	11.406
.274	11.891	-.022	25.298	.274	18.022	.022	22.450	.329	15.223	.065	17.910	.384	18.000	.065	15.456
.220	4.747	-.043	15.965	.220	12.492	0.000	24.000	.274	11.601	.043	13.385	.329	16.881	.043	15.477
.165	5.272	-.065	22.474	.165	9.155	-.022	20.393	.220	9.291	.022	14.174	.274	17.586	.022	16.455
.110	2.577	-.086	18.237	.110	6.267	-.043	15.526	.165	7.795	0.000	20.000	.220	15.349	0.000	18.000
.056	.644	-.108	11.851	.056	4.072	-.065	17.124	.110	4.357	-.022	19.532	.165	9.195	-.022	14.714
.001	.059	-.129	7.491	.001	1.704	-.086	13.718	.056	2.546	-.043	15.757	.110	6.130	-.043	16.686
0.000	0.000	-.151	4.421	0.000	0.000	-.108	9.610	.001	.814	-.065	13.822	.056	4.184	-.065	14.438
0.000	0.000	-.172	2.211	0.000	0.000	-.129	7.750	0.000	0.000	-.086	12.855	.001	1.873	-.086	11.428
0.000	0.000	-.194	1.719	0.000	0.000	-.151	7.440	0.000	0.000	-.108	9.797	0.000	0.000	-.108	8.693
0.000	0.000	-.215	.061	0.000	0.000	-.172	3.798	0.000	0.000	-.129	6.958	0.000	0.000	-.129	7.569
0.000	0.000	0.000	0.000	0.000	0.000	-.194	2.583	0.000	0.000	-.151	6.708	0.000	0.000	-.151	6.021
0.000	0.000	0.000	0.000	0.000	0.000	-.215	1.912	0.000	0.000	-.172	5.679	0.000	0.000	-.172	4.686
0.000	0.000	0.000	0.000	0.000	0.000	-.237	.930	0.000	0.000	-.194	4.306	0.000	0.000	-.194	2.926
0.000	0.000	0.000	0.000	0.000	0.000	-.258	.362	0.000	0.000	-.215	3.339	0.000	0.000	-.215	2.014
0.000	0.000	0.000	0.000	0.000	0.000	-.280	0.000	0.000	0.000	-.237	2.309	0.000	0.000	-.237	1.272
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.258	.936	0.000	0.000	-.258	.488
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.280	.530	0.000	0.000	-.280	.064
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.301	0.000	0.000	0.000	-.301	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.555770	1.931951		.543884	1.946685		.525604	1.942823	.539153	1.914187						
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A						
.018704	.022829		.022640	.029700		.024584	.040981	.036019	.042287						
VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B						
.017175	.023827		.025281	.023646		.022518	.033514	.030760	.039867						
AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C						
10.4230	12.3830		11.3043	8.5392		8.3815	7.5959	8.3804	7.4556						

MEDIUM NOZZLE DIAMETER = 1.094CM JET STRENGTH = 2.20 FROUDE NO. = INF.															
STATION 10.00				STATION 0.00				STATION 0.00				STATION 0.00			
VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C
Y/D	Z/HW			Y/D	Z/HW			Y/D	Z/HW			Y/D	Z/HW		
.985	1.195	.301	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.930	1.537	.280	.324	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.875	1.942	.258	.572	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.821	2.425	.237	.858	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.766	2.905	.215	1.354	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.711	5.826	.194	1.926	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.657	9.006	.172	2.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.602	8.899	.151	5.856	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.549	12.165	.129	6.599	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.493	14.000	.108	6.332	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.438	12.826	.086	7.973	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.384	12.399	.065	8.545	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.329	13.701	.043	12.169	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.274	11.479	.022	8.869	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.220	10.544	0.000	14.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.165	9.390	-.022	12.417	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.110	7.662	-.043	8.926	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.056	4.802	-.065	9.613	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.086	7.034	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.108	3.662	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.129	2.785	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.151	3.662	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.172	2.365	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.194	1.049	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.215	.916	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.237	.704	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.258	.477	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.280	.229	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.301	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.527777	1.914214		0.000000	0.000000		0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A						
.006663	.006117		0.000000	0.000000		0.000000	0.000000	0.000000	0.000000						
VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B						
.003933	.004517		0.000000	0.000000		0.000000	0.000000	0.000000	0.000000						
AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C						
7.9046	4.5474		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000						

TABLE 5 - continued

MEDIUM NOZZLE DIAMETER = 1.046CM															
JET LENGTH = 3.85				FROUD NO. = INF.											
STATION 1.00				STATION 3.00				STATION 5.00				STATION 7.00			
VERTICAL		HORIZ		VERTICAL		HORIZ		VERTICAL		HORIZ		VERTICAL		HORIZ	
Y/D	C	Y/D	C	Y/D	C	Y/D	C	Y/D	C	Y/D	C	Y/D	C	Y/D	C
.666	0.000	.086	0.000	.736	0.000	.129	0.000	.821	0.000	.215	0.000	.875	0.000	.254	0.000
.626	5.427	.075	3.971	.714	5.147	.104	4.594	.766	3.251	.194	3.656	.821	7.69	.237	2.808
.602	12.890	.065	7.941	.692	12.685	.086	24.306	.711	9.561	.172	3.656	.766	8.641	.215	3.648
.580	46.131	.054	12.454	.670	15.075	.065	48.168	.687	27.287	.151	9.900	.711	15.194	.194	6.397
.558	62.411	.043	40.398	.648	21.325	.043	57.505	.602	31.662	.129	17.264	.657	18.621	.172	4.733
.537	132.678	.032	84.421	.626	18.974	.022	75.290	.588	45.839	.104	23.625	.602	25.895	.151	12.065
.515	204.048	.022	122.135	.604	50.739	0.000	91.000	.493	52.476	.086	25.200	.588	29.443	.129	19.606
.493	268.577	.011	222.533	.583	75.174	0.000	75.548	.438	54.000	.065	32.737	.493	34.291	.104	16.954
.471	284.000	0.000	282.000	.561	91.000	0.000	69.362	.386	41.313	.043	42.919	.438	35.000	.086	21.947
.449	255.419	0.000	224.260	.539	84.614	0.000	48.761	.329	34.619	.022	46.631	.386	34.704	.065	30.716
.427	212.001	0.000	124.492	.517	87.134	0.000	40.690	.274	23.079	0.000	54.000	.329	29.029	.043	31.048
.405	143.163	0.000	81.654	.495	77.212	0.000	21.787	.220	10.711	0.000	48.094	.274	27.846	.022	27.147
.384	93.670	0.000	40.570	.473	75.174	0.000	5.632	.165	4.782	0.000	45.056	.220	19.747	0.000	32.036
.362	64.448	0.000	19.681	.451	67.101	0.000	1.296	.110	1.530	0.000	34.706	.165	10.051	0.000	34.012
.340	36.205	0.000	6.899	.430	57.681	0.000	0.000	.056	1.191	0.000	38.419	.110	11.115	0.000	35.000
.318	15.264	0.000	1.094	.408	42.667	0.000	0.000	0.000	0.000	0.000	28.912	.056	5.439	0.000	28.499
.296	2.374	0.000	.173	.386	34.562	0.000	0.000	0.000	0.000	0.000	21.994	.001	1.774	0.000	25.171
.274	.719	0.000	0.000	.364	20.440	0.000	0.000	0.000	0.000	0.000	13.725	0.000	0.000	0.000	15.758
0.000	0.000	0.000	0.000	.342	15.626	0.000	0.000	0.000	0.000	0.000	9.406	0.000	0.000	0.000	16.518
0.000	0.000	0.000	0.000	.320	7.537	0.000	0.000	0.000	0.000	0.000	1.350	0.000	0.000	0.000	12.377
0.000	0.000	0.000	0.000	.298	4.780	0.000	0.000	0.000	0.000	0.000	.056	0.000	0.000	0.000	7.241
0.000	0.000	0.000	0.000	.277	2.622	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.656
0.000	0.000	0.000	0.000	.255	.368	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.404
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.237
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.104
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.489163		1.936915		.446619		1.953437		.489964		1.949543		.521419		1.931845	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.002773		.002028		.005955		.010312		.014573		.024195		.025646		.032989	
VARIANCE R		VARIANCE R		VARIANCE R		VARIANCE R		VARIANCE R		VARIANCE R		VARIANCE R		VARIANCE R	
.002594		.001391		.005989		.010718		.015979		.023480		.030557		.034178	
AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C	
182.4955		76.2969		38.3823		40.4927		22.8198		23.7054		18.0947		15.5727	

[illegible]

TABLE 5 - continued

MEDIUM NOZZLE DIAMETER = 1.004CM											
JET STRENGTH = 6.76				FROUDE NO. = INF.							
STATION 1.00				STATION 1.00				STATION 5.00			
VERTICAL	MOI17	Y/D = .49		VERTICAL	MOI17	Y/D = .49		VERTICAL	MOI17	Y/D = .49	
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.646	0.000	.086	0.000	.799	0.000	.215	0.000	.910	0.000	.258	0.000
.674	10.897	.075	11.196	.777	4.215	.194	.270	.875	8.199	.237	1.210
.602	42.333	.065	69.768	.755	4.599	.172	5.400	.821	7.298	.215	12.792
.580	171.142	.054	156.977	.733	27.145	.151	14.581	.766	20.658	.194	16.595
.558	272.236	.043	220.556	.711	27.145	.129	33.752	.711	39.856	.172	37.179
.537	368.706	.032	247.075	.689	46.703	.108	53.329	.657	71.762	.151	31.721
.515	412.250	.022	365.155	.668	79.919	.086	82.626	.602	75.334	.129	44.945
.493	457.676	.011	460.804	.646	85.651	.065	108.412	.548	86.000	.108	52.637
.471	494.000	0.000	494.000	.624	92.901	.043	123.124	.493	84.990	.086	67.676
.449	434.304	-.011	473.182	.602	106.558	.022	131.904	.438	84.428	.065	75.196
.427	374.490	-.022	402.289	.580	119.709	0.000	145.000	.384	85.326	.043	72.084
.405	322.515	-.032	301.014	.558	121.564	-.022	133.929	.329	75.222	.022	84.358
.384	170.765	-.043	162.919	.537	134.209	-.043	129.744	0.000	86.000	.000	46.000
.362	66.593	-.054	102.401	.515	134.930	-.065	105.032	.220	72.191	-.022	84.358
.340	44.799	-.065	52.888	.493	135.390	-.086	85.326	.165	54.115	-.043	74.937
.318	16.951	-.075	4.002	.471	134.593	-.108	44.283	.110	43.786	-.065	60.675
.296	0.000	-.086	3.376	.449	140.279	-.129	22.547	.056	27.863	-.086	68.454
0.000	0.000	-.097	0.000	.427	145.000	-.151	12.691	.001	14.820	-.108	50.736
0.000	0.000	0.000	0.000	.405	127.971	-.172	6.480	0.000	0.000	-.129	34.227
0.000	0.000	0.000	0.000	.384	114.483	-.194	1.485	0.000	0.000	-.151	25.843
0.000	0.000	0.000	0.000	.362	107.570	-.215	.810	0.000	0.000	-.172	19.447
0.000	0.000	0.000	0.000	.340	93.407	0.000	0.000	0.000	0.000	-.194	11.755
0.000	0.000	0.000	0.000	.318	66.767	0.000	0.000	0.000	0.000	-.215	6.310
0.000	0.000	0.000	0.000	.296	55.640	0.000	0.000	0.000	0.000	-.237	2.939
0.000	0.000	0.000	0.000	.274	47.378	0.000	0.000	0.000	0.000	-.258	.259
0.000	0.000	0.000	0.000	.252	41.308	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.231	30.855	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.209	24.953	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.187	24.616	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.165	16.355	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.143	9.442	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.121	8.262	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.099	5.564	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.078	1.517	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.056	.337	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.472607	1.933920		.482758	1.934743		.535540	1.922052	.496852	1.909527		
VARIANCE A	.003450		.014947	.017725		.032550	.035066	.036675	.051430		
VARIANCE B	.003170		.016421	.020218		.046572	.039049	.062975	.052824		
AVERAGE C	.054499		.665410	.590826		.516449	.408997	.32.9527	.25.1394		

MEDIUM NOZZLE DIAMETER = 1.004CM											
JET STRENGTH = 6.76				FROUDE NO. = INF.							
STATION 9.00				STATION 11.00				STATION 0.00			
VERTICAL	MOI17	Y/D = .49		VERTICAL	MOI17	Y/D = .49		VERTICAL	MOI17	Y/D = 0.00	
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.985	4.196	.387	0.000	.985	5.587	.473	0.000	.985	5.080	.516	0.000
.930	8.714	.366	.658	.930	11.124	.430	1.535	.930	15.435	.473	1.039
.875	10.956	.344	2.741	.875	14.781	.387	2.149	.875	10.355	.430	1.645
.821	19.814	.323	6.825	.821	15.086	.344	2.686	.821	12.374	.387	2.944
.766	37.686	.301	8.334	.766	14.578	.301	5.525	.766	21.296	.344	5.802
.711	21.635	.280	7.785	.711	21.181	.258	6.674	.711	14.821	.301	3.983
.657	29.684	.258	11.130	.657	25.042	.215	14.120	.657	18.300	.258	12.383
.602	46.000	.237	17.545	.602	24.648	.172	19.875	.602	22.924	.215	18.011
.548	75.821	.215	15.352	.548	32.000	.129	29.851	.548	26.571	.172	19.483
.493	41.804	.194	23.959	.493	27.687	.086	32.000	.493	28.330	.129	27.536
.438	39.861	.172	22.369	.438	27.987	.065	29.668	.438	31.000	.086	30.567
.384	61.338	.151	29.936	.384	27.683	0.000	27.931	.384	28.069	.065	31.000
.329	36.287	.129	35.747	.329	28.394	-.043	30.082	.329	25.985	0.000	30.480
.274	34.966	.108	36.541	.274	26.768	-.086	29.621	.274	20.059	-.043	25.631
.220	29.760	.086	43.313	.220	25.244	-.129	20.873	.220	18.561	-.086	24.852
.165	21.912	.065	36.515	.165	20.825	-.172	17.727	.165	22.143	-.129	22.774
.110	17.794	.043	43.807	.110	17.879	-.215	15.114	.110	16.292	-.172	18.964
.056	12.199	.022	46.000	.056	13.663	-.258	4.285	.056	14.393	-.215	13.335
0.001	5.983	0.000	44.794	.001	10.514	-.301	5.141	.001	10.110	-.258	11.640
0.000	0.000	-.022	41.998	0.000	0.000	-.344	3.760	0.000	0.000	-.301	7.534
0.000	0.000	-.043	41.644	0.000	0.000	-.387	1.224	0.000	0.000	-.344	4.156
0.000	0.000	-.065	30.644	0.000	0.000	-.430	1.151	0.000	0.000	-.387	3.550
0.000	0.000	-.086	40.517	0.000	0.000	-.473	0.000	0.000	0.000	-.430	2.165
0.000	0.000	-.108	31.414	0.000	0.000	-.516	0.000	0.000	0.000	-.473	.346
0.000	0.000	-.129	24.662	0.000	0.000	-.559	0.000	0.000	0.000	-.516	.253
0.000	0.000	-.151	26.943	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.172	12.613	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.194	12.665	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.215	11.788	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.237	13.152	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.258	10.616	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.280	5.539	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.301	3.619	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.323	3.269	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.344	1.728	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.366	.693	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.387	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.470162	3.912619		.489170	1.934743		.496741	1.922052	0.000000	0.000000		
VARIANCE A	.014144		.013104	.017725		.017725	.035066	.036675	.051430		
VARIANCE B	.004004		.004104	.020218		.046572	.039049	.062975	.052824		
AVERAGE C	.011004		.011004	.011004		.011004	.011004	.011004	.011004		

TABLE 5 - continued

LARGE NOZZLE DIAMETER = 1.882CM											
JET STRENGTH = .27				FROUDE NO. = INF.							
STATION 1.00				STATION 2.00				STATION 3.00			
VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.799	0.000	.129	0.000	.985	0.000	.215	0.000	.910	0.000	.258	0.000
.777	4.630	.118	1.467	.910	4.630	.194	0.000	.875	3.582	.237	.298
.755	9.491	.108	6.387	.875	6.388	.172	.837	.821	9.138	.215	1.266
.733	8.565	.097	8.396	.821	12.488	.151	2.893	.766	13.086	.194	2.085
.711	24.537	.086	11.314	.766	23.637	.129	12.256	.711	25.514	.172	2.979
.690	34.491	.075	18.613	.711	33.409	.108	13.855	.657	28.000	.151	3.872
.668	41.475	.065	27.007	.657	44.000	.086	17.433	.602	26.319	.129	8.787
.646	41.056	.054	53.650	.602	35.376	.065	31.059	.548	27.708	.108	9.681
.624	55.093	.043	60.401	.548	21.557	.043	35.017	.493	25.076	.086	20.851
.602	69.907	.032	90.876	.493	16.929	.022	31.211	.438	18.715	.065	21.894
.580	101.389	.022	112.956	.438	9.024	0.000	43.543	.384	15.426	.043	20.553
.558	116.435	.011	125.000	.384	5.430	-.022	44.000	.329	12.574	.022	19.213
.537	125.000	0.000	120.073	.329	2.396	-.043	37.910	.274	8.407	0.000	28.000
.515	109.722	-.011	109.489	.274	.319	-.065	25.349	.220	4.606	-.022	26.213
.493	104.167	-.022	100.547	0.000	0.000	-.086	18.422	.165	1.243	-.043	21.968
.471	83.333	-.032	87.774	0.000	0.000	-.108	10.505	.110	.292	-.065	18.915
.449	73.148	-.043	62.591	0.000	0.000	-.129	8.678	0.000	0.000	-.086	15.638
.427	59.954	-.054	50.182	0.000	0.000	-.151	6.775	0.000	0.000	-.108	13.181
.405	47.454	-.065	41.788	0.000	0.000	-.172	3.573	0.000	0.000	-.129	10.128
.384	34.491	-.075	25.182	0.000	0.000	-.194	1.903	0.000	0.000	-.151	7.447
.362	26.157	-.086	15.146	0.000	0.000	-.215	.152	0.000	0.000	-.172	6.032
.340	17.130	-.097	6.752	0.000	0.000	0.000	0.000	0.000	0.000	-.194	3.426
.318	7.639	-.108	3.832	0.000	0.000	0.000	0.000	0.000	0.000	-.215	1.862
.296	1.157	-.118	1.277	0.000	0.000	0.000	0.000	0.000	0.000	-.237	.596
.274	0.000	-.129	1.277	0.000	0.000	0.000	0.000	0.000	0.000	-.258	.223
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.428427	1.938557	.326417	1.940965	.405215	1.949918	.389988	1.956052	VARIANCE A	.006290	.011830	.019012
VARIANCE A	.006290	.011830	.019012	VARIANCE B	.005851	.010282	.017085	VARIANCE C	.005851	.010282	.017085
VARIANCE B	.005851	.010282	.017085	AVERAGE C	47.9352	45.7591	15.9881	AVERAGE C	47.9352	45.7591	15.9881

LARGE NOZZLE DIAMETER = 1.882CM											
JET STRENGTH = .27				FROUDE NO. = INF.							
STATION 5.00				STATION 7.00				STATION 9.00			
VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.985	1.276	.344	0.000	.985	1.952	.387	0.000	.985	3.440	.430	0.000
.930	4.004	.301	.681	.930	4.568	.344	.662	.930	3.440	.387	.258
.875	4.985	.258	1.985	.875	4.880	.301	1.087	.875	1.920	.344	.229
.821	7.396	.215	2.722	.821	4.997	.258	1.749	.821	3.700	.301	.831
.766	12.462	.172	5.331	.766	6.168	.215	2.316	.766	4.900	.258	2.780
.711	12.381	.129	6.919	.711	8.081	.172	3.593	.711	6.020	.215	2.666
.657	13.974	.086	13.385	.657	8.042	.129	9.265	.657	6.500	.172	3.354
.602	16.794	.043	19.000	.602	13.000	.086	10.684	.602	7.420	.129	4.070
.548	19.000	0.000	17.979	.548	10.502	.043	12.575	.548	9.000	.086	8.742
.493	15.700	-.043	14.107	.493	9.565	0.000	13.000	.493	7.620	.043	7.424
.438	12.299	-.086	13.328	.438	7.691	-.043	10.778	.438	6.040	0.000	9.000
.384	11.748	-.129	10.266	.384	6.324	-.086	10.495	.384	7.100	-.043	8.083
.329	8.335	-.172	5.218	.329	3.709	-.129	8.178	.329	6.000	-.086	7.653
.274	4.086	-.215	2.836	.274	3.084	-.172	4.869	.274	4.160	-.129	5.532
.220	5.189	-.258	1.531	.220	2.811	-.215	2.033	.220	3.260	-.172	3.726
.165	3.473	-.301	.510	.165	2.420	-.258	.756	.165	2.360	-.215	2.809
.110	2.819	-.344	.113	.110	1.601	-.301	.331	.110	1.720	-.258	2.952
.056	1.757	0.000	0.000	.056	.898	-.344	.047	.056	1.000	-.301	1.032
.001	.572	0.000	0.000	.001	.898	-.387	.142	.001	.440	-.344	.373
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.387	.344
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.430	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.411448	1.440426	.393244	1.422519	.419428	1.948476	.400000	0.000000	VARIANCE A	.044906	.034713	.054225
VARIANCE A	.044906	.034713	.054225	VARIANCE B	.027106	.042526	.023433	VARIANCE C	.027106	.042526	.023433
VARIANCE B	.027106	.042526	.023433	AVERAGE C	8.3011	6.9361	5.3257	AVERAGE C	8.3011	6.9361	5.3257

TABLE 5 - continued

LARGE NOZZLE DIAMETER = 1.882CM															
JET STRENGTH = .93				FROUDE NO. = INF.											
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C
Y/D	Z/HW			Y/D	Z/HW			Y/D	Z/HW			Y/D	Z/HW		
.775	0.000	.129	0.000	.875	0.000	.172	0.000	.910	0.000	.215	0.000	.985	2.000	.301	0.000
.753	32.788	.118	2.697	.821	7.328	.151	4.083	.875	12.357	.194	1.609	.910	4.800	.280	7.095
.731	44.433	.108	6.742	.766	8.794	.129	7.078	.821	26.841	.172	4.768	.875	13.600	.258	8.318
.709	62.900	.097	9.978	.711	34.076	.108	10.884	.766	57.007	.151	12.184	.821	26.200	.237	9.297
.687	58.216	.086	16.989	.657	74.182	.086	23.445	.711	62.470	.129	11.034	.766	34.400	.215	11.009
.666	79.628	.075	24.539	.602	89.771	.065	47.909	.657	99.767	.108	13.103	.711	36.800	.194	12.232
.644	131.822	.065	36.404	.548	146.000	.043	66.642	.602	100.000	.086	23.678	.657	64.800	.172	14.414
.622	177.323	.054	62.562	.493	123.481	.022	112.696	.548	94.249	.065	41.879	.602	77.000	.151	20.306
.600	241.561	.043	79.281	.438	83.404	0.000	144.000	.493	30.404	.043	71.034	.648	80.000	.129	24.709
.578	317.844	.032	143.191	.384	64.855	-.022	123.312	.438	54.632	.022	100.000	.693	52.800	.108	49.174
.556	360.000	.022	194.742	.329	41.405	-.043	85.747	.384	45.131	0.000	94.851	.738	46.800	.086	55.046
.534	321.859	.011	301.483	.274	28.467	-.065	84.197	.329	37.767	-.022	87.816	.784	41.000	.065	59.450
.513	297.100	0.000	355.845	.220	16.489	-.086	58.253	.274	21.853	-.043	72.644	.829	25.600	.043	67.523
.491	244.234	-.011	360.000	.165	.366	-.108	53.848	.220	3.083	-.065	60.000	.874	13.600	.022	78.287
.469	188.030	-.022	307.146	.110	0.000	-.129	34.571	.165	1.900	-.086	45.287	.920	9.200	0.000	80.000
.447	121.115	-.032	230.022	.056	0.000	-.151	16.605	.110	0.000	-.108	34.023	.165	5.400	-.022	74.128
.425	56.208	-.043	175.820	0.000	0.000	-.172	4.628	0.000	0.000	-.129	25.517	.110	1.200	-.043	61.896
.403	40.149	-.054	142.652	0.000	0.000	-.194	.272	0.000	0.000	-.151	14.483	.056	2.200	-.065	63.853
.381	16.729	-.065	113.794	0.000	0.000	0.000	0.000	0.000	0.000	-.172	8.506	0.000	0.000	-.086	52.844
.360	0.000	-.075	43.955	0.000	0.000	0.000	0.000	0.000	0.000	-.194	4.138	0.000	0.000	-.108	48.196
.339	0.000	-.086	46.112	0.000	0.000	0.000	0.000	0.000	0.000	-.215	0.000	0.000	0.000	-.129	36.962
0.000	0.000	-.097	25.614	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.151	32.783
0.000	0.000	-.108	8.629	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.172	25.443
0.000	0.000	-.118	1.888	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.194	17.615
0.000	0.000	-.129	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.215	11.743
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.237	8.073
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.258	5.872
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.280	3.180
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.301	.734
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.406407	1.955337	.447793	1.975916	.386506	1.960065	.399616	1.946597								
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A								
.004654	.005004	.012993	.013937	.018931	.018211	.022751	.044293								
VARIANCE R	VARIANCE R	VARIANCE R	VARIANCE R	VARIANCE R	VARIANCE R	VARIANCE R	VARIANCE R								
.003830	.003868	.009887	.010381	.016682	.014729	.017815	.038133								
AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C								
*2.9687	*7.7573	44.8626	49.0435	40.4691	34.7674	29.8556	32.4201								

LARGE NOZZLE DIAMETER = 1.882CM															
JET STRENGTH = .93				FROUDE NO. = INF.											
STATION 5.00				STATION 7.00				STATION 9.00				STATION 0.00			
VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C	VERTICAL	HORIZ	Y/D	C
Y/D	Z/HW			Y/D	Z/HW			Y/D	Z/HW			Y/D	Z/HW		
.985	4.688	.301	0.000	.985	3.845	.344	0.000	.985	14.095	.387	0.000	0.000	0.000	0.000	0.000
.930	8.621	.258	1.606	.930	10.255	.301	1.413	.930	15.204	.344	.825	0.000	0.000	0.000	0.000
.875	24.955	.215	5.277	.875	26.308	.258	3.108	.875	22.858	.301	2.888	0.000	0.000	0.000	0.000
.821	26.770	.172	13.767	.821	18.922	.215	5.463	.821	24.020	.258	4.401	0.000	0.000	0.000	0.000
.766	37.508	.129	27.993	.766	25.209	.172	12.621	.766	29.721	.215	9.214	0.000	0.000	0.000	0.000
.711	45.826	.086	49.103	.711	27.162	.129	28.916	.711	35.000	.172	17.603	0.000	0.000	0.000	0.000
.657	48.851	.043	59.428	.657	41.262	.086	26.655	.657	33.047	.129	23.104	0.000	0.000	0.000	0.000
.602	67.000	0.000	67.000	.602	41.812	.043	32.589	.602	30.988	.086	32.387	0.000	0.000	0.000	0.000
.548	58.228	-.043	62.870	.548	44.009	0.000	47.000	.548	24.336	.043	35.000	0.000	0.000	0.000	0.000
.493	56.111	-.086	56.445	.493	40.957	-.043	40.030	.493	24.811	0.000	34.931	0.000	0.000	0.000	0.000
.438	44.011	-.129	46.120	.438	47.000	-.086	41.820	.438	23.756	-.043	23.929	0.000	0.000	0.000	0.000
.384	33.424	-.172	29.599	.384	35.647	-.129	33.909	.384	17.262	-.086	20.010	0.000	0.000	0.000	0.000
.329	25.862	-.215	17.202	.329	31.313	-.172	28.162	.329	13.409	-.129	13.477	0.000	0.000	0.000	0.000
.274	20.720	-.258	8.949	.274	30.458	-.215	15.918	.274	9.449	-.172	10.452	0.000	0.000	0.000	0.000
.220	18.149	-.301	4.818	.220	22.401	-.258	9.701	.220	7.021	-.215	6.739	0.000	0.000	0.000	0.000
.165	11.494	-.344	.688	.165	19.960	-.301	5.557	.165	3.115	-.258	3.163	0.000	0.000	0.000	0.000
.110	6.201	0.000	0.000	.110	14.527	-.344	1.036	.110	3.229	-.301	.688	0.000	0.000	0.000	0.000
.054	.454	0.000	0.000	.054	10.478	-.387	.094	.054	2.903	-.344	.344	0.000	0.000	0.000	0.000
.001	.151	0.000	0.000	.001	6.287	0.000	0.000	.001	1.109	-.387	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.401233	1.990021	.454674	1.998602	.347572	1.991777	0.000000	0.000000								
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A								
.070489	.045518	.043667	.058136	.039160	.055012	0.000000	0.000000								
VARIANCE R	VARIANCE R	VARIANCE R	VARIANCE R	VARIANCE R	VARIANCE R	VARIANCE R	VARIANCE R								
.024522	.049475	.041726	.055717	.034885	.051694	0.000000	0.000000								
AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C								
28.3697	28.1796	26.1986	18.5551	17.6486	12.5871	0.0000	0.0000								

LARGE NOZZLE DIAMETER = 1.882CM															
JFT STRENGTH = 1.77				FROUDE No. = INF.											
STATION 2.00				STATION 4.00				STATION 6.00				STATION 8.00			
VERTICAL		HORIZ		VERTICAL		HORIZ		VERTICAL		HORIZ		VERTICAL		HORIZ	
Y/D	C	Y/D	C	Y/D	C	Y/D	C	Y/D	C	Y/D	C	Y/D	C	Y/D	C
.821	0.000	.140	0.000	.985	0.000	.258	0.000	.985	8.903	.101	0.000	.985	22.122	.387	0.000
.799	8.214	.129	2.119	.910	4.706	.217	4.832	.930	20.141	.258	1.157	.930	23.619	.164	6.189
.777	31.801	.118	9.083	.875	7.131	.215	7.732	.875	51.665	.215	4.821	.875	36.427	.101	8.733
.755	71.505	.108	9.688	.821	15.866	.194	7.152	.821	78.519	.172	24.879	.821	33.100	.258	.364
.733	76.040	.097	12.411	.766	43.576	.172	10.244	.766	80.708	.129	21.600	.766	45.575	.215	8.733
.711	72.688	.086	14.229	.711	84.474	.151	14.303	.711	74.870	.086	60.171	.711	67.531	.172	13.833
.690	10.398	.075	27.453	.657	124.193	.129	17.009	.657	105.665	.063	90.643	.657	75.515	.129	11.833
.668	162.697	.065	56.009	.602	120.833	.108	21.455	.602	104.205	.000	104.721	.602	83.000	.086	48.781
.646	147.967	.054	100.817	.568	146.000	.086	25.901	.568	96.762	.043	108.000	.548	76.180	.043	74.263
.624	219.201	.043	137.147	.493	129.161	.065	58.566	.443	108.000	.000	84.086	.493	72.155	.000	83.000
.602	252.949	.032	174.229	.438	114.883	.043	93.745	.438	83.773	.129	87.364	.438	80.505	.043	70.077
.580	278.680	.022	201.752	.384	92.103	.022	118.679	.384	86.108	.172	48.214	.384	61.210	.086	48.235
.558	247.610	.011	186.193	.329	59.224	.000	144.000	.329	74.724	.215	25.264	.329	54.890	.129	34.862
.537	297.000	.000	284.587	.274	50.707	.022	111.141	.274	54.000	.258	6.943	.274	63.373	.172	23.116
.515	245.642	.011	297.000	.220	28.721	.043	109.015	.220	46.995	.301	.193	.220	43.080	.215	13.469
.493	248.038	.022	287.312	.165	19.609	.086	89.879	.165	38.674	.000	0.000	.165	25.449	.258	7.281
.471	236.533	.032	236.147	.110	14.657	.086	76.929	.110	30.065	.000	0.000	.110	13.473	.301	2.002
.449	221.472	.043	211.018	.054	3.461	.104	43.683	.056	24.081	.000	0.000	.056	19.461	.364	1.274
.427	193.078	.054	180.138	.000	0.000	.129	38.851	.001	16.054	.000	0.000	.001	10.479	.387	1.274
.405	164.401	.065	141.083	.000	0.000	.151	36.145	.000	0.000	.000	0.000	.000	0.000	.000	0.000
.384	133.451	.075	110.505	.000	0.000	.172	31.506	.000	0.000	.000	0.000	.000	0.000	.000	0.000
.362	98.411	.086	101.110	.000	0.000	.194	24.934	.000	0.000	.000	0.000	.000	0.000	.000	0.000
.340	64.170	.097	78.110	.000	0.000	.215	16.627	.000	0.000	.000	0.000	.000	0.000	.000	0.000
.318	43.463	.108	62.670	.000	0.000	.237	11.984	.000	0.000	.000	0.000	.000	0		

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TABLE 5 - continued

LARGE NOZZLE DIAMETER = 1.882CM											
JET STRENGTH = 2.85				FROUDE NO. = INF.							
STATION 2.00				STATION 4.00				STATION 6.00			
VERTICAL	HORIZ	Y/D = .54		VERTICAL	HORIZ	Y/D = .55		VERTICAL	HORIZ	Y/D = .55	
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.821	0.000	.140	0.000	.930	0.000	.215	0.000	.985	0.000	.258	0.000
.799	30.241	.129	20.799	.875	37.593	.194	2.407	.930	29.221	.237	13.762
.777	35.282	.118	24.092	.821	49.005	.172	5.718	.875	69.295	.215	11.260
.755	110.885	.108	38.897	.766	107.066	.151	15.348	.821	96.845	.194	21.805
.733	156.247	.097	59.155	.711	161.586	.129	42.732	.766	109.160	.172	28.240
.711	194.678	.086	126.054	.657	197.420	.108	73.728	.711	133.371	.151	57.016
.690	244.531	.075	134.247	.602	211.710	.086	113.150	.657	146.103	.129	51.833
.669	291.072	.065	186.109	.548	218.086	.065	96.298	.602	158.000	.108	65.059
.646	317.534	.054	284.431	.493	226.000	.043	112.434	.548	166.661	.086	113.317
.624	357.225	.043	362.764	.438	205.135	.022	210.051	.493	156.894	.065	120.824
.602	365.416	.032	398.060	.384	196.081	0.000	226.000	.438	125.440	.043	123.326
.580	396.917	.022	462.718	.329	159.387	-.022	215.768	.384	99.141	.022	130.475
.558	470.000	.011	459.925	.274	105.525	-.043	195.305	.329	79.522	0.000	142.271
.537	441.649	0.000	470.000	.220	46.807	-.065	206.439	.274	67.416	-.022	158.000
.515	447.949	-.011	445.640	.165	27.700	-.086	160.694	.220	47.797	-.043	133.335
.493	392.426	-.022	439.075	.110	20.885	-.108	97.803	.165	34.856	-.065	118.679
.471	368.105	-.032	393.017	.056	12.091	-.129	49.052	.110	14.193	-.086	132.084
.449	300.523	-.043	364.925	.001	.220	-.151	35.510	.056	13.984	-.108	104.380
.427	146.568	-.054	292.264	0.000	0.000	-.172	27.385	.001	4.383	-.129	75.064
.405	160.927	-.065	190.971	0.000	0.000	-.194	12.940	0.000	0.000	-.151	61.484
.384	128.525	-.075	134.029	0.000	0.000	-.215	0.000	0.000	0.000	-.172	41.645
.362	84.424	-.086	107.506	0.000	0.000	0.000	0.000	0.000	0.000	-.194	26.452
.340	49.142	-.097	63.477	0.000	0.000	0.000	0.000	0.000	0.000	-.215	21.984
.318	27.721	-.108	39.977	0.000	0.000	0.000	0.000	0.000	0.000	-.237	13.762
.296	20.791	-.118	26.741	0.000	0.000	0.000	0.000	0.000	0.000	-.258	.179
.274	8.190	-.129	17.828	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.252	0.000	-.140	1.080	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN				MEAN				MEAN			
.403544	1.937171		.442975	1.961742		.406541	1.955002	.429064	2.135668		
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A		
.008872	.008615		.024552	.019310		.033363	.036131	.046011	.063646		
VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B		
.008962	.009553		.030663	.020756		.037169	.034525	.043273	.063183		
AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C		
*6.5321	*4.7271		*0.2275	93.2746		80.4885	70.6496	66.0494	52.9768		

LARGE NOZZLE DIAMETER = 1.882CM											
JET STRENGTH = 2.85				FROUDE NO. = INF.							
STATION 10.00				STATION 12.00				STATION 14.00			
VERTICAL	HORIZ	Y/D = .60		VERTICAL	HORIZ	Y/D = .60		VERTICAL	HORIZ	Y/D = 0.00	
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.985	25.755	.387	0.000	.985	29.140	.430	0.000	0.000	0.000	0.000	0.000
.930	44.261	.344	7.848	.930	46.850	.387	3.035	0.000	0.000	0.000	0.000
.875	61.997	.301	30.772	.875	42.329	.344	5.918	0.000	0.000	0.000	0.000
.821	67.549	.258	27.054	.821	56.899	.301	10.319	0.000	0.000	0.000	0.000
.766	63.345	.215	22.304	.766	66.319	.258	13.202	0.000	0.000	0.000	0.000
.711	80.812	.172	36.967	.711	58.531	.215	18.210	0.000	0.000	0.000	0.000
.657	94.075	.129	38.000	.657	75.488	.172	30.198	0.000	0.000	0.000	0.000
.602	88.214	.086	65.674	.602	63.432	.129	42.035	0.000	0.000	0.000	0.000
.548	95.000	.043	88.806	.548	74.232	.086	58.728	0.000	0.000	0.000	0.000
.493	45.130	0.000	95.000	.493	78.000	.043	67.074	0.000	0.000	0.000	0.000
.438	40.373	-.043	85.500	.438	65.188	0.000	78.000	0.000	0.000	0.000	0.000
.384	85.438	-.086	53.902	.384	59.411	-.043	72.992	0.000	0.000	0.000	0.000
.329	62.459	-.129	51.837	.329	40.570	-.086	69.350	0.000	0.000	0.000	0.000
.274	51.356	-.172	41.511	.274	36.451	-.129	57.817	0.000	0.000	0.000	0.000
.220	61.071	-.215	27.467	.220	31.401	-.172	39.600	0.000	0.000	0.000	0.000
.165	36.242	-.258	17.967	.165	25.749	-.215	36.258	0.000	0.000	0.000	0.000
.110	26.372	-.301	9.500	.110	26.628	-.258	11.533	0.000	0.000	0.000	0.000
.056	19.123	-.344	4.957	.056	17.298	-.301	19.119	0.000	0.000	0.000	0.000
.001	11.975	-.387	1.033	.001	13.188	-.344	2.429	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.387	.354	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.430	.304	0.000	0.000	0.000	0.000
MEAN				MEAN				MEAN			
.429064	1.918191		.405448	1.956175		.406000	1.955000	.429064	2.135668		
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A		
.067417	.022817		.050450	.074484		.060000	.060000	.060000	.060000		
VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B		
.054462	.060948		.051390	.071341		.060000	.060000	.060000	.060000		
AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C		
60.5519	37.1630		47.7691	29.8588		0.0000	0.0000	0.0000	0.0000		

TABLE 6 - DIFFUSION DATA - 3/4-INCH ROCK ROUGHNESS - HEAT

TEMPERATURE DISTRIBUTIONS
INJECTION TEMPERATURE = 23.9 DEGREES CENTIGRADE

VARIANCE A USES BASIC DEFINITION
VARIANCE B USES REFLECTION PRINCIPLE

TABLE 6 - continued

[illegible][illegible]

TABLE 6 - continued

SMALL NOZZLE DIAMETER = .46RCM												
JET STRENGTH = 2.73				FROUDE NO. = 56.50				STATION 0.00				
STATION 2.50				STATION 0.00				STATION 0.00				
VERTICAL	STATION	HOIIZ	Y/D= .51	VERTICAL	STATION	HOIIZ	Y/D= .51	VERTICAL	STATION	HOIIZ	Y/D= .51	VERTICAL
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D
.878	.011	.301	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.824	.023	.280	.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.771	.014	.258	.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.717	.037	.237	.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.663	.051	.215	.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.610	.075	.194	.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.556	.069	.172	.034	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.503	.104	.151	.041	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.449	.098	.129	.039	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.395	.117	.108	.063	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.342	.040	.086	.101	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.288	.045	.065	.087	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.235	.030	.043	.107	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.181	.034	.022	.094	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.128	.012	0.000	.122	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.074	.008	-.022	.101	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.043	.122	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.065	.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.086	.102	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.108	.094	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.129	.081	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.151	.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.172	.038	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.194	.026	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.215	.027	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.237	.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.258	.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.280	.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.301	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN			MEAN		MEAN		MEAN		MEAN		MEAN	
.491755		1.962126		0.000000		0.000000		0.000000		0.000000		0.000000
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A
.024824		.041600		0.000000		0.000000		0.000000		0.000000		0.000000
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B
.018633		.041596		0.000000		0.000000		0.000000		0.000000		0.000000
AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T
.0507		.0519		0.0000		0.0000		0.0000		0.0000		0.0000

SMALL NOZZLE DIAMETER = .46RCM															
JET STRENGTH = 3.12				FROUDE NO. = 108.00											
STATION .50				STATION 1.00				STATION 1.50				STATION 2.00			
VERTICAL	DT	HORIZ	Y/D= .51	VERTICAL	DT	HORIZ	Y/D= .51	VERTICAL	DT	HORIZ	Y/D= .51	VERTICAL	DT	HORIZ	Y/D= .51
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.728	0.000	.086	0.000	.771	0.000	.129	0.000	.824	0.000	.172	0.000	.878	0.000	.215	0.000
.706	.009	.075	.015	.749	.027	.118	.037	.771	.023	.151	.011	.824	.008	.194	.003
.685	.014	.065	.068	.728	.061	.108	.051	.717	.113	.129	.026	.771	.030	.172	.004
.663	.018	.054	.139	.706	.138	.097	.094	.663	.219	.108	.049	.717	.094	.151	.002
.642	.041	.043	.499	.685	.062	.086	.116	.610	.397	.086	.074	.663	.145	.129	.015
.621	.070	.032	1.051	.663	.074	.075	.163	.556	.498	.065	.306	.610	.272	.108	.026
.599	.095	.022	1.833	.642	.129	.065	.200	.503	.680	.043	.206	.556	.399	.086	.107
.578	.336	.011	2.071	.621	.229	.054	.296	.449	.506	.022	.669	.503	.414	.065	.124
.556	.804	0.000	1.705	.599	.211	.043	.270	.345	.305	0.000	.449	.449	.341	.043	.089
.535	1.038	-.011	.811	.578	.551	.032	.375	.342	.189	-.022	.512	.395	.278	.022	.296
.513	2.062	-.022	.263	.556	.905	.022	.698	.288	.170	-.043	.427	.342	.210	0.000	.301
.492	1.819	-.032	.193	.535	.836	.011	.745	.235	.068	-.065	.246	.288	.133	-.022	.272
.471	.732	-.043	.076	.513	.891	0.000	.913	.181	.029	-.046	.110	.235	.083	-.043	.354
.449	.331	-.054	.023	.492	.662	-.011	.807	.122	.013	-.108	.113	.181	.031	-.665	.164
.428	.160	-.065	.001	.471	.692	-.022	.644	.074	.003	-.129	.071	.128	.014	-.086	.100
.406	.026	0.000	0.000	.449	.476	-.032	.535	0.000	0.000	-.151	.040	.074	.001	-.106	.073
.385	.001	0.000	0.000	.428	.192	-.043	.216	0.000	0.000	-.172	.011	0.000	0.000	-.124	.049
.363	.001	0.000	0.000	.406	.132	-.054	.113	0.000	0.000	-.194	.004	0.000	0.000	-.151	.027
0.000	0.000	0.000	0.000	.385	.090	-.065	.032	0.000	0.000	0.000	0.000	0.000	0.000	-.144	.019
0.000	0.000	0.000	0.000	.363	.002	-.075	.050	0.000	0.000	0.000	0.000	0.000	0.000	-.215	.002
0.000	0.000	0.000	0.000	.342	.000	-.084	.027	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.320	.613	-.097	.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.299	.001	-.108	.023	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.278	.000	-.118	.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.257	.000	-.129	.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.444799		1.914757		.440360		1.977573		.471292		1.957225		.440653		1.946174	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.061396		.061192		.060293		.060523		.061513		.061672		.061467		.061390	
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B	
.000000		.001194		.001000		.001000		.000874		.000817		.001396		.001171	
AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T	
.4198		.5632		.2707		.2561		.2142		.1847		.1533		.0927	

TABLE 6 - continued

SMALL NOZZLE DIAMETER = .469CM															
JET STRENGTH = 5.12				FROUDE NO. = 108.00											
STATION 2.50				STATION 3.00				STATION 0.00				STATION 0.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.878	0.000	.215	0.000	.931	0.000	.301	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.824	.004	.194	.024	.878	.004	.258	.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.771	.021	.172	.015	.824	.051	.215	.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.717	.049	.151	.020	.771	.085	.172	.024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.663	.046	.129	.028	.717	.088	.129	.065	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.610	.285	.108	.077	.663	.138	.086	.113	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.556	.253	.086	.111	.610	.146	.043	.115	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.503	.254	.065	.107	.556	.207	0.000	.178	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.449	.354	.043	.174	.503	.153	-.043	.126	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.395	.246	.022	.315	.449	.146	-.086	.105	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.342	.205	0.000	.299	.395	.154	-.124	.079	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.288	.157	-.022	.140	.342	.147	-.172	.064	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.235	.107	-.043	.178	.288	.117	-.215	.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.181	.054	-.065	.077	.235	.097	-.258	.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.128	.013	-.086	.074	.181	.048	-.301	.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.108	.074	.128	.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.129	.092	.074	.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.151	.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.172	.023	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.194	.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.215	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.501282	1.938799			.463373	1.954358			0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.015932	.021385			.010017	.042302			0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
VARIANCE R	VARIANCE R			VARIANCE R	VARIANCE R			VARIANCE R	VARIANCE R	VARIANCE R	VARIANCE R	VARIANCE R	VARIANCE R	VARIANCE R	VARIANCE R
.013773	.010004			.025452	.030864			0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T
.1393	.0903			.0980	.0627			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

SMALL NOZZLE DIAMETER = .469CM															
JET STRENGTH = 9.15				FROUDE NO. = 193.00											
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.728	0.000	.129	0.000	.824	0.000	.215	0.000	.931	0.000	.258	0.000	.931	.030	.344	0.000
.706	.015	.118	.030	.771	.134	.194	.044	.878	.032	.237	.012	.878	.093	.323	.010
.685	.020	.108	.068	.717	.249	.172	.055	.824	.127	.215	.032	.824	.119	.301	.017
.663	.036	.097	.080	.663	.336	.151	.094	.771	.110	.194	.044	.771	.100	.280	.031
.642	.075	.086	.108	.610	.552	.124	.066	.717	.129	.172	.044	.717	.186	.258	.022
.621	.168	.075	.120	.556	.550	.108	.144	.663	.208	.151	.086	.663	.237	.237	.034
.599	.351	.065	.148	.503	.625	.086	.384	.610	.241	.129	.129	.610	.199	.215	.025
.578	.565	.054	.052	.449	.434	.065	.395	.556	.386	.108	.149	.556	.181	.194	.044
.556	.903	.043	.206	.395	.358	.043	.398	.503	.247	.086	.233	.503	.145	.172	.070
.535	1.698	.032	.436	.342	.241	.022	.592	.449	.370	.065	.195	.449	.108	.151	.068
.513	1.589	.022	.753	.288	.208	0.000	.694	.395	.247	.043	.199	.395	.094	.129	.114
.492	1.058	.011	1.311	.235	.108	-.022	.653	.342	.167	.022	.354	.342	.066	.108	.132
.471	.742	0.000	1.440	.181	.043	-.043	.442	.288	.131	0.000	.286	.288	.049	.086	.107
.449	.542	-.011	1.695	.128	.013	-.065	.243	.235	.083	-.022	.252	.235	.041	.065	.134
.428	.360	-.022	1.668	.074	.004	-.086	.177	.181	.044	-.043	.154	.181	.018	.043	.159
.406	.202	-.032	1.244	0.000	0.000	-.108	.149	.128	.044	-.065	.132	.128	.022	.145	.145
.385	.083	-.043	.438	0.000	0.000	-.129	.072	.074	.004	-.086	.120	.074	.002	0.000	.215
.363	.036	-.054	.753	0.000	0.000	-.151	.061	.020	0.000	-.108	.079	0.000	0.000	-.022	.163
.342	.014	-.065	.548	0.000	0.000	-.172	.024	0.000	0.000	-.129	.067	0.000	0.000	-.043	.119
.320	.002	-.075	.354	0.000	0.000	-.194	.006	0.000	0.000	-.151	.053	0.000	0.000	-.065	.107
.299	.002	-.086	.194	0.000	0.000	-.215	0.000	0.000	0.000	-.172	.041	0.000	0.000	-.086	.135
0.000	0.000	-.097	.211	0.000	0.000	0.000	0.000	0.000	0.000	-.194	.028	0.000	0.000	-.108	.106
0.000	0.000	-.108	.082	0.000	0.000	0.000	0.000	0.000	0.000	-.215	.017	0.000	0.000	-.129	.041
0.000	0.000	-.118	.002	0.000	0.000	0.000	0.000	0.000	0.000	-.237	.011	0.000	0.000	-.151	.048
0.000	0.000	0.000	0.660	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.172	.044
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.194	.029
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.215	.019
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.237	.026
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.258	.013
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.280	.002
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.301	.004
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.323	.001
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.344	.001
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.452079	1.955687			.452685	1.955573			.452699	1.904852			.377089	1.905943		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.002499	.005645			.016575	.017708			.024451	.030354			.024451	.024451		
VARIANCE R	VARIANCE R			VARIANCE R	VARIANCE R			VARIANCE R	VARIANCE R	VARIANCE R	VARIANCE R	VARIANCE R	VARIANCE R	VARIANCE R	VARIANCE R
.001596	.000010			.011624	.011624			.017708	.016203			.025048	.025048		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T
.4044	.5105			.2609	.2143			.1434	.1132			.0975	.0680		

TABLE 6 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 1.48								FROUDE NO. = 19.00							
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.593	0.000	.097	0.000	.871	0.000	.172	0.000	.925	0.000	.258	0.000	.925	0.000	.301	0.000
.571	.030	.086	.010	.818	.025	.151	.015	.871	.006	.237	.015	.871	.016	.258	.007
.550	.157	.075	.156	.764	.152	.129	.015	.818	.031	.215	.025	.818	.030	.215	.018
.524	.399	.065	.063	.711	.158	.104	.035	.764	.055	.194	.037	.764	.041	.172	.038
.507	.314	.054	.197	.657	.313	.086	.043	.711	.079	.172	.072	.711	.070	.129	.042
.486	.671	.043	.339	.603	.413	.065	.184	.657	.133	.151	.088	.657	.087	.086	.100
.464	.782	.037	.404	.550	.556	.043	.330	.603	.146	.129	.105	.603	.161	.043	.160
.443	1.674	.027	.838	.496	.583	.027	.420	.550	.220	.108	.094	.550	.244	0.000	.246
.421	1.638	.011	1.241	.443	.485	0.000	.502	.496	.292	.086	.160	.496	.201	.043	.212
.400	1.721	0.000	1.633	.389	.449	-.022	.475	.443	.292	.065	.083	.443	.214	-.086	.171
.378	1.102	-.011	1.426	.335	.322	-.043	.395	.389	.243	.043	.232	.389	.174	-.129	.117
.357	.647	-.022	1.249	.282	.213	-.065	.264	.235	.221	.022	.299	.335	.156	-.172	.067
.335	.647	-.037	.985	.228	.116	-.086	.130	.282	.218	0.000	.342	.282	.109	-.215	.033
.314	.342	-.043	.678	.175	.053	-.104	.080	.228	.183	-.022	.340	.228	.061	-.258	.016
.293	.189	-.054	.490	.121	.001	-.129	.039	.175	.151	-.043	.311	.175	.048	-.301	.003
.271	.062	-.065	.232	.068	0.000	-.151	.016	.121	.083	-.065	.210	.121	.028	-.344	.001
.250	.012	-.075	.161	0.000	0.000	-.172	.002	.068	.036	-.086	.161	0.000	.003	0.000	0.000
.228	0.000	-.086	.073	0.000	0.000	0.000	0.000	.014	.023	-.108	.121	0.000	0.000	0.000	0.000
0.000	0.000	-.097	.012	0.000	0.000	0.000	0.000	0.000	0.000	-.129	.090	0.000	0.000	0.000	0.000
0.000	0.000	-.108	.005	0.000	0.000	0.000	0.000	0.000	0.000	-.151	.075	0.000	0.000	0.000	0.000
0.000	0.000	-.118	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.172	.047	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.194	.030	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.215	.020	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.237	.003	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.258	.002	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.543685	1.952461			.473109	1.951024			.542057	1.939187			.488096	1.974446		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.002949	.003594			.016722	.010173			.026465	.029460			.022481	.038096		
VARIANCE H	VARIANCE H			VARIANCE H	VARIANCE H			VARIANCE H	VARIANCE H			VARIANCE H	VARIANCE H		
.002239	.002720			.017256	.009865			.026916	.020713			.018069	.024467		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.5515	.4879			.2400	.1765			.1341	.1185			.0971	.0794		

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 1.48								FROUDE NO. = 19.00							
STATION 5.00				STATION 6.00				STATION 0.00				STATION 0.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.925	.014	.387	0.000	.925	.006	.473	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.871	.057	.344	.005	.871	.018	.430	.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.818	.100	.301	.014	.818	.033	.387	.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.764	.114	.258	.022	.764	.030	.344	.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.711	.138	.215	.011	.711	.046	.301	.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.657	.147	.172	.055	.657	.060	.258	.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.603	.150	.129	.041	.603	.070	.215	.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.550	.126	.086	.091	.550	.114	.172	.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.496	.156	.043	.113	.496	.102	.129	.061	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.443	.135	0.000	.143	.443	.087	.086	.090	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.389	.111	-.043	.148	.389	.112	.043	.084	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.335	.114	-.086	.115	.335	.103	0.000	.117	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.282	.077	-.129	.079	.282	.076	-.043	.096	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.228	.052	-.172	.046	.228	.062	-.086	.086	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.175	.078	-.215	.026	.175	.048	-.129	.087	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.121	.021	-.258	.017	.121	.024	-.172	.041	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.068	.013	-.301	.008	.068	.012	-.215	.036	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.344	.001	0.000	0.000	-.258	.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.387	0.000	0.000	0.000	-.301	.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.344	.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.387	.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.430	.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.473	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.426438	1.949525			.500427	1.944349			0.000000	0.000000			0.000000	0.000000		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.072857	.055186			.039493	.077832			0.000000	0.000000			0.000000	0.000000		
VARIANCE H	VARIANCE H			VARIANCE H	VARIANCE H			VARIANCE H	VARIANCE H			VARIANCE H	VARIANCE H		
.037505	.043524			.027556	.054993			0.000000	0.000000			0.000000	0.000000		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.0422	.0491			.0604	.0354			0.0000	0.0000			0.0000	0.0000		

TABLE 6 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 2.83				FROUDE NO. = 37.30											
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	HORIZ	Y/D = .51		VERTICAL	HORIZ	Y/D = .51		VERTICAL	HORIZ	Y/D = .51		VERTICAL	HORIZ	Y/D = .51	
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.678	0.000	.097	0.000	.764	0.000	.172	0.000	.925	0.000	.258	0.000	.925	.032	.301	0.000
.657	.008	.086	.027	.711	.089	.151	.012	.871	.041	.247	.007	.871	.082	.258	.016
.636	.074	.075	.058	.657	.209	.129	.027	.818	.070	.215	.015	.818	.120	.215	.049
.614	.440	.065	.116	.603	.362	.108	.091	.764	.091	.194	.011	.764	.139	.172	.034
.593	.933	.054	.176	.550	.894	.086	.203	.711	.222	.172	.021	.711	.133	.129	.100
.571	1.377	.043	.410	.496	.836	.065	.288	.657	.178	.151	.048	.657	.179	.086	.158
.550	1.984	.032	.940	.443	.948	.043	.698	.603	.319	.129	.094	.603	.305	.043	.233
.528	2.257	.022	1.170	.389	.989	.022	.666	.550	.444	.108	.171	.550	.297	0.000	.319
.507	2.331	.011	2.063	.335	.166	0.000	.982	.496	.572	.086	.266	.496	.346	-.043	.356
.486	1.598	0.000	2.286	.282	.219	-.022	.837	.443	.455	.065	.335	.443	.246	-.086	.293
.464	1.103	-.011	2.007	.224	.041	-.043	.810	.389	.330	.043	.465	.389	.279	-.129	.175
.443	.682	-.022	1.506	.175	.025	-.065	.579	.335	.264	.022	.539	.335	.266	-.172	.149
.421	.390	-.032	1.016	.121	.018	-.086	.460	.282	.145	0.000	.594	.282	.194	-.215	.090
.400	.164	-.043	.715	.068	.003	-.104	.298	.228	.048	-.022	.496	.228	.153	-.258	.040
.378	.126	-.054	.261	0.000	0.000	-.129	.168	.175	.041	-.043	.535	.175	.149	-.301	.026
.357	.074	-.065	.118	0.000	0.000	-.151	.097	.121	.016	-.065	.419	.121	.116	-.344	.005
.335	.027	-.075	.062	0.000	0.000	-.172	.040	.088	.004	-.086	.302	.088	.083	0.000	0.000
.314	.004	-.086	.038	0.000	0.000	-.194	.006	.014	.003	-.108	.223	0.000	0.000	0.000	0.000
.293	0.000	-.097	.011	0.000	0.000	-.215	.001	0.000	0.000	-.129	.150	0.000	0.000	0.000	0.000
.0000	0.000	-.108	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.151	.102	0.000	0.000	0.000	0.000
.0000	0.000	-.118	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.172	.056	0.000	0.000	0.000	0.000
.0000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.194	.019	0.000	0.000	0.000	0.000
.0000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.215	.003	0.000	0.000	0.000	0.000
.0000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.237	.002	0.000	0.000	0.000	0.000
.0000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.258	.002	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.448870	1.941870			.483960	1.971812			.461811	1.951575			.490712	2.004758		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.002459	.002678			.009415	.013005			.018521	.020241			.030586	.046072		
VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B		
.002183	.002227			.008178	.011234			.012828	.018611			.031153	.036331		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.7185	.6181			.3071	.3296			.1805	.1950			.1835	.1277		

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 2.83				FROUDE NO. = 37.30											
STATION 5.00				STATION 6.00				STATION 0.00				STATION 0.00			
VERTICAL	HORIZ	Y/D = .51		VERTICAL	HORIZ	Y/D = .51		VERTICAL	HORIZ	Y/D = 0.00		VERTICAL	HORIZ	Y/D = 0.00	
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.925	.027	.387	0.000	.925	.031	.473	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.871	.044	.344	.006	.871	.047	.430	.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.818	.102	.301	.019	.818	.035	.387	.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.764	.106	.258	.015	.764	.067	.344	.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.711	.166	.215	.031	.711	.109	.301	.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.657	.112	.172	.039	.657	.115	.258	.024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.603	.249	.129	.057	.603	.172	.215	.059	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.550	.224	.086	.112	.550	.154	.172	.124	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.496	.272	.043	.150	.496	.155	.129	.096	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.443	.264	0.000	.243	.443	.207	.086	.116	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.389	.241	-.043	.272	.389	.185	.043	.193	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.335	.232	-.086	.236	.335	.155	0.000	.205	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.282	.223	-.129	.196	.282	.110	-.043	.185	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.228	.196	-.172	.127	.228	.070	-.086	.166	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.175	.152	-.215	.075	.175	.088	-.129	.113	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.121	.120	-.258	.046	.121	.070	-.172	.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.068	.064	-.301	.033	.068	.021	-.215	.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.0000	0.000	-.344	.015	0.000	0.000	-.258	.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.0000	0.000	-.387	.024	0.000	0.000	-.301	.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.0000	0.000	-.430	.007	0.000	0.000	-.344	.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.0000	0.000	-.473	.001	0.000	0.000	-.387	.034	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.0000	0.000	-.516	0.000	0.000	0.000	-.430	.024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.0000	0.000	0.000	0.000	0.000	0.000	-.473	.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.0000	0.000	0.000	0.000	0.000	0.000	-.516	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.509731	2.032168			.487157	1.973045			0.000000	0.000000			0.000000	0.000000		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.036519	.012914			.034109	.010307			0.000000	0.000000			0.000000	0.000000		
VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B		
.040666	.042713			.028128	.070592			0.000000	0.000000			0.000000	0.000000		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.1846	.0769			.1053	.0683			0.0000	0.0000			0.0000	0.0000		

TABLE 6 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 4.83				FROUDE NO. = 67.10				STATION 2.00				STATION 3.00			
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.700	0.000	.047	0.000	.871	0.000	.172	0.000	.925	0.000	.215	0.000	.925	.047	.301	0.000
.678	.049	.046	.017	.818	.034	.151	.090	.871	.086	.194	.019	.871	.055	.258	.021
.657	.288	.075	.064	.764	.061	.129	.111	.818	.068	.172	.034	.818	.167	.215	.034
.636	.301	.065	.162	.711	.126	.108	.204	.764	.160	.151	.058	.764	.284	.172	.081
.614	.850	.054	.222	.657	.016	.086	.268	.711	.138	.129	.083	.711	.307	.129	.103
.593	1.455	.043	1.071	.603	1.192	.065	.544	.657	.357	.108	.405	.657	.411	.086	.181
.571	1.906	.032	1.351	.550	1.290	.043	.921	.603	.444	.086	.426	.603	.475	.043	.432
.550	2.335	.022	1.414	.496	1.403	.022	1.308	.550	.551	.065	.604	.550	.536	0.000	.488
.528	2.730	.011	2.417	.443	1.108	0.000	1.398	.496	.629	.043	.444	.496	.486	.043	.415
.507	2.861	0.000	2.522	.389	.429	-.022	1.066	.443	.349	.022	.644	.443	.507	.086	.325
.486	1.992	-.011	2.264	.335	.382	-.043	.906	.389	.383	0.000	.649	.389	.483	.129	.212
.464	1.159	-.022	2.136	.282	.216	-.065	.604	.335	.384	-.022	.662	.335	.390	-.172	.186
.443	.966	-.032	1.291	.228	.087	-.086	.342	.282	.256	-.043	.625	.282	.305	-.215	.109
.421	.599	-.043	.711	.175	.024	-.108	.167	.228	.135	-.065	.471	.228	.221	-.258	.048
.400	.335	-.054	.516	.121	.005	-.129	.051	.175	.091	-.086	.285	.175	.166	-.301	.005
.378	.124	-.065	.152	.064	.008	-.151	.009	.121	.041	-.108	.194	.121	.118	-.344	.002
.357	.047	-.075	.066	.000	0.000	-.172	.004	.064	.009	-.129	.215	.064	.040	0.000	0.000
.335	.026	-.086	.041	.000	0.000	-.194	0.000	0.000	0.000	-.172	.066	0.000	0.000	0.000	0.000
.314	.002	-.097	.006	.000	0.000	0.000	0.000	0.000	0.000	-.194	.038	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.000	0.000	0.000	0.000	0.000	0.000	-.215	.005	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.000	0.000	0.000	0.000	0.000	0.000	-.237	.001	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.000	0.000	0.000	0.000	0.000	0.000			0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.443363	1.937915			.46089	1.933366			.469368	1.936519			.470194	1.988057		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.002948	.002911			.016616	.011132			.022317	.020532			.030417	.040518		
VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B		
.002714	.003110			.011300	.009247			.017543	.021288			.034306	.032367		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.9382	.8908			.4676	.4505			.2460	.2789			.2779	.1651		

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 4.83				FROUDE NO. = 67.10				STATION 5.00				STATION 6.00			
STATION 5.00				STATION 6.00				STATION 7.00				STATION 8.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.925	.048	.387	0.000	.925	.034	.473	0.000	.925	.079	.516	0.000	0.000	0.000	0.000	0.000
.871	.067	.344	.034	.871	.045	.430	.014	.871	.118	.473	.028	0.000	0.000	0.000	0.000
.818	.099	.301	.069	.818	.040	.387	.041	.818	.228	.430	.034	0.000	0.000	0.000	0.000
.764	.126	.258	.126	.764	.061	.344	.064	.764	.177	.387	.043	0.000	0.000	0.000	0.000
.711	.248	.215	.207	.711	.095	.301	.084	.711	.238	.344	.063	0.000	0.000	0.000	0.000
.657	.210	.172	.232	.657	.168	.258	.099	.657	.262	.301	.112	0.000	0.000	0.000	0.000
.603	.300	.129	.219	.603	.189	.215	.097	.603	.238	.258	.140	0.000	0.000	0.000	0.000
.550	.341	.086	.275	.550	.196	.172	.071	.550	.241	.215	.218	0.000	0.000	0.000	0.000
.496	.382	.043	.321	.496	.306	.129	.177	.496	.268	.172	.188	0.000	0.000	0.000	0.000
.443	.443	0.000	.411	.443	.277	.086	.096	.443	.205	.129	.256	0.000	0.000	0.000	0.000
.389	.333	-.043	.314	.389	.275	.043	.226	.389	.197	.066	.212	0.000	0.000	0.000	0.000
.335	.221	-.086	.375	.335	.245	0.000	.274	.335	.229	.043	.240	0.000	0.000	0.000	0.000
.282	.221	-.129	.373	.282	.242	-.043	.178	.282	.107	0.000	.250	0.000	0.000	0.000	0.000
.228	.108	-.172	.221	.228	.213	-.086	.181	.228	.086	-.043	.237	0.000	0.000	0.000	0.000
.175	.069	-.215	.191	.175	.183	-.129	.119	.175	.067	-.086	.219	0.000	0.000	0.000	0.000
.121	.044	-.258	.107	.121	.148	-.172	.064	.121	.091	-.129	.221	0.000	0.000	0.000	0.000
.068	.074	-.301	.073	.068	.094	-.215	.068	.068	.078	-.172	.177	0.000	0.000	0.000	0.000
.014	.045	-.344	.037	.014	.054	-.258	.054	.014	.011	-.215	.129	0.000	0.000	0.000	0.000
0.000	0.000	-.387	.043	0.000	0.000	-.301	.052	0.000	0.000	-.258	.102	0.000	0.000	0.000	0.000
0.000	0.000	-.430	0.000	0.000	0.000	-.344	.032	0.000	0.000	-.301	.098	0.000	0.000	0.000	0.000
0.000	0.000	-.473	.012	0.000	0.000	-.387	.022	0.000	0.000	-.344	.079	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.430	.016	0.000	0.000	-.387	.050	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.473	.003	0.000	0.000	-.430	.035	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.473	.013	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.516	.007	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.559	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.481142	1.960000			.546418	1.876059			.431273	1.916403			0.000000	0.000000		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.014219	.005402			.030345	.0125472			.041707	.012675			0.000000	0.000000		
VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B		
.021214	.006154			.011354	.007250			.045854	.012750			0.000000	0.000000		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.1912	.1733			.1590	.0884			.1623	.1212			0.0000	0.0000		

TABLE 6 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 8.10				FROUDE NO. = 119.00											
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	HORIZ	Y/D = .49		VERTICAL	HORIZ	Y/D = .50		VERTICAL	HORIZ	Y/D = .50		VERTICAL	HORIZ	Y/D = .50	
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.678	0.000	.086	0.000	.818	0.000	.172	0.000	.871	0.000	.215	0.000	.871	.063	.301	0.000
.657	.064	.075	.113	.764	.118	.151	.012	.818	.050	.194	.015	.818	.208	.258	.079
.636	.229	.065	.124	.711	.307	.129	.061	.764	.234	.172	.230	.764	.338	.215	.172
.614	.749	.054	.279	.657	.801	.108	.086	.711	.417	.151	.207	.711	.394	.172	.098
.593	1.461	.044	.984	.603	.750	.086	.284	.657	.547	.129	.195	.657	.337	.129	.305
.571	1.726	.032	1.185	.550	1.159	.065	1.052	.603	.975	.108	.392	.603	.525	.086	.321
.550	2.177	.022	1.632	.496	1.620	.043	1.177	.550	1.071	.086	.726	.550	.630	.043	.610
.528	2.058	.011	2.017	.443	1.883	.022	1.615	.496	1.133	.065	.698	.496	.746	0.000	.732
.507	2.277	0.000	2.335	.389	1.531	0.000	1.782	.443	1.086	.043	.926	.443	.655	-.043	.736
.486	1.914	-.011	2.782	.335	1.222	-.022	1.689	.389	.770	.022	.984	.389	.611	-.086	.549
.464	1.533	-.022	2.386	.282	.760	-.043	1.164	.335	.561	0.000	1.042	.335	.593	-.129	.326
.443	.977	-.032	2.374	.228	.459	-.065	.742	.282	.500	-.022	1.082	.282	.391	-.172	.248
.421	.638	-.043	2.141	.175	.244	-.086	.711	.228	.322	-.043	1.128	.228	.402	-.215	.165
.400	.387	-.054	1.563	.121	.179	-.108	.245	.175	.081	-.065	1.029	.175	.282	-.258	.046
.378	.239	-.065	.986	.068	.014	-.129	.078	.121	.124	-.086	.508	.121	.172	-.301	.007
.357	.121	-.075	.675	.014	0.000	-.151	.023	.068	.068	-.108	.440	.068	.063	-.344	0.000
.335	.073	-.086	.530	0.000	0.000	-.172	.002	.014	.034	-.129	.321	.014	.011	0.000	0.000
.314	.034	-.097	.419	0.000	0.000	0.000	0.000	0.000	0.000	-.151	.177	0.000	0.000	0.000	0.000
.293	.003	-.108	.295	0.000	0.000	0.000	0.000	0.000	0.000	-.172	.154	0.000	0.000	0.000	0.000
0.000	0.000	-.118	.214	0.000	0.000	0.000	0.000	0.000	0.000	-.194	.053	0.000	0.000	0.000	0.000
0.000	0.000	-.129	.134	0.000	0.000	0.000	0.000	0.000	0.000	-.215	.015	0.000	0.000	0.000	0.000
0.000	0.000	-.140	.074	0.000	0.000	0.000	0.000	0.000	0.000	-.237	.003	0.000	0.000	0.000	0.000
0.000	0.000	-.151	.044	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.161	.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN			MEAN	MEAN			MEAN	MEAN			MEAN	MEAN		
.451534	1.975711			.514703	1.945122			.484787	1.942858			.493983	1.957620		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.003250	.005894			.016177	.009678			.020462	.022793			.030291	.045906		
VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B		
.003472	.004843			.013706	.010096			.019402	.023152			.029127	.039402		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.8695	.9709			.6907	.6337			.4664	.4694			.3776	.2747		

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 8.10				FROUDE NO. = 119.00											
STATION 5.00				STATION 6.00				STATION 8.00				STATION 0.00			
VERTICAL	HORIZ	Y/D = .55		VERTICAL	HORIZ	Y/D = .55		VERTICAL	HORIZ	Y/D = .55		VERTICAL	HORIZ	Y/D = 0.00	
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.925	.097	.344	0.000	.925	.028	.430	0.000	.925	.084	.473	0.000	0.000	0.000	0.000	0.000
.871	.204	.301	.012	.871	.047	.387	.003	.871	.073	.430	.002	0.000	0.000	0.000	0.000
.818	.261	.258	.045	.818	.100	.344	.006	.818	.101	.387	.008	0.000	0.000	0.000	0.000
.764	.475	.215	.184	.764	.177	.301	.014	.764	.169	.344	.025	0.000	0.000	0.000	0.000
.711	.386	.172	.138	.711	.202	.258	.039	.711	.205	.301	.048	0.000	0.000	0.000	0.000
.657	.411	.129	.197	.657	.248	.215	.053	.657	.190	.258	.084	0.000	0.000	0.000	0.000
.603	.500	.086	.367	.603	.346	.172	.092	.603	.274	.215	.067	0.000	0.000	0.000	0.000
.550	.606	.043	.388	.550	.443	.129	.173	.550	.268	.172	.168	0.000	0.000	0.000	0.000
.496	.561	0.000	.578	.496	.381	.086	.243	.496	.257	.129	.169	0.000	0.000	0.000	0.000
.443	.513	-.043	.403	.443	.232	.043	.338	.443	.231	.086	.144	0.000	0.000	0.000	0.000
.389	.407	-.086	.325	.389	.338	0.000	.419	.389	.232	.043	.194	0.000	0.000	0.000	0.000
.335	.365	-.129	.300	.335	.273	-.043	.350	.335	.173	0.000	.271	0.000	0.000	0.000	0.000
.282	.278	-.172	.234	.282	.174	-.086	.371	.282	.256	-.043	.280	0.000	0.000	0.000	0.000
.228	.173	-.215	.121	.228	.153	-.129	.314	.228	.191	-.086	.222	0.000	0.000	0.000	0.000
.175	.108	-.258	.122	.175	.074	-.172	.260	.175	.152	-.129	.206	0.000	0.000	0.000	0.000
.121	.033	-.301	.052	.121	.114	-.215	.237	.121	.100	-.172	.155	0.000	0.000	0.000	0.000
.068	.079	-.344	.015	.068	.044	-.258	.246	.068	.075	-.215	.128	0.000	0.000	0.000	0.000
.014	.035	-.387	.001	.014	.037	-.301	.198	.014	.019	-.258	.162	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.344	.170	0.000	0.000	-.301	.109	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.387	.105	0.000	0.000	-.344	.124	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.430	.045	0.000	0.000	-.387	.096	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.473	.016	0.000	0.000	-.430	.030	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.473	.028	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.516	.013	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.559	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN			MEAN	MEAN			MEAN	MEAN			MEAN	MEAN		
.429411	1.945404			.475686	2.110529			.487365	2.055112			0.000000	0.000000		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.033926	.042790			.042282	.047671			.041657	.043368			0.000000	0.000000		
VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B		
.030381	.040153			.023143	.035531			.045458	.061199			0.000000	0.000000		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.2949	.1936			.1495	.1679			.1663	.1098			0.0000	0.0000		

TABLE 6 - continued

LARGE NOZZLE DIAMETER = 1.882CM											
STATION 1.25				STATION 2.25				STATION 3.25			
VERTICAL	DT	HORIZ	Y/D=0.54	VERTICAL	DT	HORIZ	Y/D=0.57	VERTICAL	DT	HORIZ	Y/D=0.57
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.820	0.000	.174	0.000	.838	0.000	.258	0.000	.849	0.007	.258	0.000
.798	.046	.118	.037	.884	0.000	.237	.003	.895	.118	.237	.015
.777	.083	.108	.064	.831	.072	.215	.014	.841	.153	.215	.019
.756	.046	.047	.071	.777	.126	.194	.036	.788	.191	.194	.038
.734	.117	.086	.041	.723	.198	.172	.079	.734	.247	.172	.053
.713	.196	.075	.082	.670	.284	.151	.116	.681	.224	.151	.057
.691	.200	.065	.110	.616	.380	.129	.190	.627	.232	.129	.064
.670	.337	.054	.087	.563	.338	.108	.185	.573	.203	.108	.103
.644	.400	.043	.123	.504	.247	.086	.265	.520	.192	.086	.121
.627	.409	.032	.183	.456	.176	.065	.321	.466	.179	.065	.085
.606	.753	.022	.346	.402	.138	.043	.380	.413	.162	.043	.112
.584	.607	.011	.302	.348	.169	.022	.364	.359	.108	.022	.202
.563	.500	0.000	.200	.295	.114	0.000	.332	.305	.088	0.000	.230
.541	.698	-.011	.298	.241	.097	-.022	.263	.252	.043	-.022	.201
.520	.794	-.022	.170	.186	.046	-.043	.189	.198	.033	-.043	.163
.498	.622	-.032	.146	.134	.019	-.065	.082	.145	.023	-.065	.181
.477	.516	-.043	.142	0.000	0.000	-.086	.084	0.000	0.000	-.086	.128
.454	.402	-.054	.114	0.000	0.000	-.108	.124	0.000	0.000	-.108	.099
.434	.261	-.065	.064	0.000	0.000	-.129	.100	0.000	0.000	-.129	.093
.413	.207	-.075	.035	0.000	0.000	-.151	.041	0.000	0.000	-.151	.080
.391	.150	-.086	.043	0.000	0.000	-.172	.031	0.000	0.000	-.172	.061
.370	.076	-.097	.022	0.000	0.000	-.194	.010	0.000	0.000	-.194	.059
.348	.052	-.108	.024	0.000	0.000	-.215	.005	0.000	0.000	-.215	.038
.327	.026	-.118	.023	0.000	0.000	-.237	0.000	0.000	0.000	-.237	.017
.305	.044	-.129	.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.140	.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.151	.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.413610		1.925660		.426910		1.885018		.363859		1.959959	
VARIANCE A		.009083		VARIANCE A		.024794		VARIANCE A		.038581	
.007646		.009083		.022305		.024794		.030519		.029703	
VARIANCE B		.004332		VARIANCE B		.019751		VARIANCE B		.030148	
.005787		.004332		.015799		.019751		.032084		.025735	
AVERAGE T		.1015		AVERAGE T		.1339		AVERAGE T		.0888	
.3037		.1015		.1502		.1339		.1414		.0888	

LARGE NOZZLE DIAMETER = 1.882CM											
STATION 5.25				STATION 6.25				STATION 0.00			
VERTICAL	DT	HORIZ	Y/D=0.00	VERTICAL	DT	HORIZ	Y/D=0.00	VERTICAL	DT	HORIZ	Y/D=0.00
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.949	.013	0.000	0.000	.949	.028	0.000	0.000	0.000	0.000	0.000	0.000
.895	.035	0.000	0.000	.895	.054	0.000	0.000	0.000	0.000	0.000	0.000
.841	.033	0.000	0.000	.841	.091	0.000	0.000	0.000	0.000	0.000	0.000
.788	.039	0.000	0.000	.788	.108	0.000	0.000	0.000	0.000	0.000	0.000
.734	.051	0.000	0.000	.734	.130	0.000	0.000	0.000	0.000	0.000	0.000
.681	.087	0.000	0.000	.681	.113	0.000	0.000	0.000	0.000	0.000	0.000
.627	.135	0.000	0.000	.627	.090	0.000	0.000	0.000	0.000	0.000	0.000
.573	.170	0.000	0.000	.573	.100	0.000	0.000	0.000	0.000	0.000	0.000
.520	.146	0.000	0.000	.520	.131	0.000	0.000	0.000	0.000	0.000	0.000
.466	.157	0.000	0.000	.466	.096	0.000	0.000	0.000	0.000	0.000	0.000
.413	.108	0.000	0.000	.413	.114	0.000	0.000	0.000	0.000	0.000	0.000
.359	.102	0.000	0.000	.359	.091	0.000	0.000	0.000	0.000	0.000	0.000
.305	.093	0.000	0.000	.305	.074	0.000	0.000	0.000	0.000	0.000	0.000
.252	.062	0.000	0.000	.252	.060	0.000	0.000	0.000	0.000	0.000	0.000
.198	.074	0.000	0.000	.198	.067	0.000	0.000	0.000	0.000	0.000	0.000
.145	.045	0.000	0.000	.145	.064	0.000	0.000	0.000	0.000	0.000	0.000
.091	.014	0.000	0.000	.091	.038	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.463342		0.000000		.441280		0.000000		0.000000		0.000000	
VARIANCE A		0.000000		VARIANCE A		0.000000		VARIANCE A		0.000000	
.036542		0.000000		.044516		0.000000		0.000000		0.000000	
VARIANCE B		0.000000		VARIANCE B		0.000000		VARIANCE B		0.000000	
.024021		0.000000		.046195		0.000000		0.000000		0.000000	
AVERAGE T		0.0000		AVERAGE T		0.0000		AVERAGE T		0.0000	
.0755		0.0000		.0451		0.0000		0.0000		0.0000	

TABLE 6 - continued

LARGE NOZZLE DIAMETER = 1.882CM															
JET STRENGTH = 1.07				FROUDE NO. = 10.00				STATION 1.25				STATION 2.25			
STATION 1.25				STATION 2.25				STATION 3.25				STATION 4.25			
VERTICAL	Y/D	DT	Z/HW	VERTICAL	Y/D	DT	Z/HW	VERTICAL	Y/D	DT	Z/HW	VERTICAL	Y/D	DT	Z/HW
.670	0.000	.129	0.000	.949	0.000	.258	0.000	.949	.025	.258	0.000	.949	.050	.387	0.000
.648	.066	.118	.014	.895	.026	.237	.008	.895	.046	.237	.017	.895	.082	.344	.012
.627	.112	.108	.037	.841	.056	.215	.036	.841	.149	.215	.089	.841	.157	.301	.040
.606	.244	.097	.047	.788	.183	.194	.068	.788	.205	.194	.217	.788	.218	.258	.027
.584	.432	.086	.112	.734	.305	.172	.202	.734	.218	.172	.197	.734	.233	.215	.032
.563	.561	.075	.143	.681	.427	.151	.154	.681	.292	.151	.247	.681	.239	.172	.133
.541	.674	.065	.261	.627	.523	.129	.215	.627	.444	.129	.330	.627	.356	.129	.110
.520	.804	.054	.402	.573	.592	.108	.263	.573	.504	.108	.345	.573	.294	.086	.213
.498	.911	.043	.861	.520	.590	.086	.291	.520	.409	.086	.369	.520	.286	.043	.306
.477	1.073	.032	1.020	.466	.532	.065	.387	.466	.427	.065	.451	.466	.337	0.000	.339
.456	1.730	.022	1.560	.413	.398	.043	.494	.413	.344	.043	.463	.413	.266	-.043	.364
.434	1.073	.011	1.405	.359	.233	.022	.659	.359	.361	.022	.455	.359	.267	-.086	.233
.413	.941	0.000	1.752	.305	.169	0.000	.538	.305	.234	0.000	.396	.305	.174	-.129	.246
.391	1.294	-.011	1.436	.252	.106	-.022	.369	.252	.209	-.022	.286	.252	.091	-.172	.180
.370	.479	-.022	1.177	.198	.030	-.043	.446	.198	.130	-.043	.301	.198	.067	-.215	.183
.348	.647	-.032	1.385	0.000	0.000	-.065	.369	.145	.048	-.065	.251	.145	.013	-.258	.113
.327	.383	-.043	.661	0.000	0.000	-.086	.241	.091	.023	-.086	.160	0.000	0.000	-.301	.076
.305	.205	-.054	.239	0.000	0.000	-.108	.208	0.000	0.000	-.108	.119	0.000	0.000	-.344	.017
.284	.122	-.065	.284	0.000	0.000	-.129	.135	0.000	0.000	-.129	.076	0.000	0.000	-.387	.004
.263	.086	-.075	.069	0.000	0.000	-.151	.084	0.000	0.000	-.151	.059	0.000	0.000	0.000	0.000
.241	.056	-.086	.044	0.000	0.000	-.172	.033	0.000	0.000	-.172	.043	0.000	0.000	0.000	0.000
.220	.033	-.097	.033	0.000	0.000	-.194	0.000	0.000	0.000	-.194	.029	0.000	0.000	0.000	0.000
.198	.013	-.108	.002	0.000	0.000	-.215	.007	0.000	0.000	-.215	.020	0.000	0.000	0.000	0.000
0.000	0.000	-.118	.008	0.000	0.000	-.237	0.000	0.000	0.000	-.237	.002	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.511234	1.933774		.419645	1.900556		.446728	1.855582		.410362	2.010058					
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A					
.005592	.004393		.017458	.026501		.027791	.031476		.028778	.071117					
VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B					
.003032	.003801		.020175	.017023		.025679	.031215		.030123	.057475					
AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T					
.5193	.5417		.2820	.2155		.2396	.2051		.1955	.1383					

LARGE NOZZLE DIAMETER = 1.882CM															
JET STRENGTH = 1.07				FROUDE NO. = 10.00				STATION 6.25				STATION 8.25			
STATION 5.25				STATION 6.25				STATION 7.25				STATION 8.25			
VERTICAL	Y/D	DT	Z/HW	VERTICAL	Y/D	DT	Z/HW	VERTICAL	Y/D	DT	Z/HW	VERTICAL	Y/D	DT	Z/HW
.949	.061	.473	0.000	.949	.020	.516	0.000	.949	.022	.516	0.000	.949	.041	.559	0.000
.895	.073	.430	.011	.895	.068	.473	.004	.895	.093	.473	.005	.895	.043	.516	.007
.841	.141	.387	.042	.841	.093	.430	.013	.841	.114	.430	.011	.841	.063	.473	.009
.788	.234	.344	.021	.788	.147	.387	.023	.788	.149	.387	.028	.788	.079	.430	.020
.734	.259	.301	.043	.734	.242	.344	.029	.734	.145	.344	.033	.734	.114	.387	.025
.681	.244	.258	.132	.681	.263	.301	.042	.681	.148	.301	.060	.681	.138	.344	.025
.627	.263	.215	.134	.627	.226	.258	.040	.627	.144	.258	.070	.627	.118	.301	.040
.573	.296	.172	.085	.573	.239	.215	.035	.573	.162	.215	.089	.573	.108	.258	.029
.520	.259	.129	.101	.520	.241	.172	.076	.520	.148	.172	.108	.520	.111	.215	.039
.466	.251	.086	.137	.466	.250	.129	.174	.466	.114	.129	.128	.466	.111	.172	.053
.413	.203	.043	.221	.413	.246	.086	.223	.413	.094	.086	.157	.413	.087	.129	.076
.359	.184	0.000	.284	.359	.182	.043	.214	.359	.083	.043	.184	.359	.068	.086	.081
.305	.165	-.043	.148	.305	.187	0.000	.231	.305	.110	0.000	.159	.305	.075	.043	.119
.252	.162	-.066	.200	.252	.141	-.043	.177	.252	.096	-.043	.144	.252	.073	0.000	.142
.198	.104	-.129	.178	.198	.132	-.086	.182	.198	.069	-.086	.127	.198	.074	-.043	.093
.145	.082	-.172	.120	.145	.096	-.129	.189	.145	.041	-.129	.129	.145	.053	-.086	.102
.091	.041	-.215	.165	.091	.068	-.172	.167	.091	.020	-.172	.109	.091	.032	-.129	.074
0.000	0.000	-.258	.104	0.000	0.000	-.215	.155	0.000	0.000	-.215	.099	0.000	0.000	-.172	.065
0.000	0.000	-.301	.067	0.000	0.000	-.258	.132	0.000	0.000	-.258	.085	0.000	0.000	-.215	.025
0.000	0.000	-.344	.016	0.000	0.000	-.301	.110	0.000	0.000	-.301	.069	0.000	0.000	-.258	.037
0.000	0.000	-.387	.068	0.000	0.000	-.344	.079	0.000	0.000	-.344	.046	0.000	0.000	-.301	.028
0.000	0.000	-.430	0.000	0.000	0.000	-.387	.079	0.000	0.000	-.387	.033	0.000	0.000	-.344	.015
0.000	0.000	0.000	0.000	0.000	0.000	-.430	.048	0.000	0.000	-.430	.025	0.000	0.000	-.387	.002
0.000	0.000	0.000	0.000	0.000	0.000	-.473	.036	0.000	0.000	-.473	.011	0.000	0.000	-.430	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.516	.014	0.000	0.000	-.516	0.000	0.000	0.000	-.473	.004
0.000	0.000	0.000	0.000	0.000	0.000	-.559	.013	0.000	0.000	-.559	.006	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.424893	1.944344		.446081	2.054499		.408029	1.961466		.433740	1.887868					
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A					
.077441	.114859		.036517	.143617		.040240	.146465		.043075	.121242					
VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B					
.040056	.038746		.044061	.130140		.045393	.119379		.038047	.051147					
AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T					
.1777	.1618		.1636	.0967		.1029	.0737		.0816	.0443					

TABLE 6 - continued

LARGE NOZZLE DIAMETER = 1.882CM											
JET STRENGTH = 2.09				FROUDE NO. = 20.90				STATION 4.25			
STATION 1.25		HORIZ Y/D = .56		STATION 6.25		HORIZ Y/D = .56		STATION 8.25		HORIZ Y/D = .56	
VERTICAL	DT	Y/D	DT	VERTICAL	DT	Y/D	DT	VERTICAL	DT	Y/D	DT
.766	0.000	.129	0.000	.895	0.000	.172	0.000	.937	.086	.258	0.000
.765	.000	.118	.012	.874	.008	.151	.027	.883	.105	.237	.322
.723	.087	.108	.030	.857	.113	.129	.053	.831	.281	.215	.112
.707	.087	.097	.054	.831	.078	.108	.080	.777	.398	.194	.063
.681	.261	.086	.374	.804	.185	.086	.176	.723	.710	.172	.034
.659	.434	.075	.536	.788	.124	.065	1.032	.670	.923	.151	.072
.638	.755	.065	.967	.766	.213	.043	1.089	.616	1.053	.129	.327
.616	1.236	.054	1.395	.745	.202	.022	1.513	.563	.877	.108	.390
.595	1.984	.043	1.522	.723	.304	0.000	1.517	.509	1.024	.086	.472
.573	3.046	.032	2.847	.702	.370	-.027	1.082	.456	.831	.065	.569
.552	2.986	.022	1.074	.681	.516	-.043	.894	.402	.690	.043	.738
.531	3.440	.011	3.440	.659	.556	-.065	.474	.348	.449	.022	1.020
.509	2.378	0.000	2.614	.638	.642	-.086	.287	.245	.322	0.000	.844
.488	2.157	-.011	1.919	.616	.990	-.108	.080	.241	.218	-.022	.759
.466	1.416	-.022	1.386	.595	1.510	-.129	.031	.188	.142	-.043	.612
.445	1.029	-.032	.801	.573	1.248	-.151	.027	.134	.062	-.065	.663
.423	.454	-.043	.298	.552	1.274	-.172	.015	.080	.004	-.086	.610
.402	.454	-.054	.199	.531	.994	0.000	0.000	0.000	0.000	-.108	.336
.380	.187	-.065	.114	.509	1.043	0.000	0.000	0.000	0.000	-.129	.211
.359	.087	-.075	.060	.488	.886	0.000	0.000	0.000	0.000	-.151	.174
.338	.033	-.086	.054	.466	.808	0.000	0.000	0.000	0.000	-.172	.124
.316	.013	-.097	.009	.445	.584	0.000	0.000	0.000	0.000	-.194	.097
.295	.020	-.108	.009	.423	.359	0.000	0.000	0.000	0.000	-.215	.084
.0000	0.000	0.000	0.000	.402	.276	0.000	0.000	0.000	0.000	-.237	.053
.0000	0.000	0.000	0.000	.380	.195	0.000	0.000	0.000	0.000	-.258	.013
.0000	0.000	0.000	0.000	.359	.070	0.000	0.000	0.000	0.000	0.000	0.000
.0000	0.000	0.000	0.000	.338	.046	0.000	0.000	0.000	0.000	0.000	0.000
.0000	0.000	0.000	0.000	.316	.018	0.000	0.000	0.000	0.000	0.000	0.000
.0000	0.000	0.000	0.000	.295	.004	0.000	0.000	0.000	0.000	0.000	0.000
.0000	0.000	0.000	0.000	.273	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.0000	0.000	0.000	0.000	.252	.002	0.000	0.000	0.000	0.000	0.000	0.000
MFAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.433165	1.905232	.400457	1.926537	.415403	1.949825	.420469	1.923735				
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A				
.003714	.003567	.008662	.008635	.024341	.026449	.027528	.029434				
VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H				
.002794	.002701	.005219	.008271	.024215	.018237	.024615	.026152				
AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T				
.9970	.9463	.4411	.4867	.4860	.3317	.3301	.2574				

LARGE NOZZLE DIAMETER = 1.882CM											
JET STRENGTH = 2.09				FROUDE NO. = 20.90				STATION 5.25			
STATION 5.25		HORIZ Y/D = .62		STATION 6.25		HORIZ Y/D = .62		STATION 7.25		HORIZ Y/D = .62	
VERTICAL	DT	Y/D	DT	VERTICAL	DT	Y/D	DT	VERTICAL	DT	Y/D	DT
.937	.068	.301	0.000	.937	.101	.387	0.000	.937	.117	.430	.001
.883	.123	.280	.014	.883	.182	.344	.005	.883	.159	.387	.006
.830	.254	.258	.026	.830	.157	.301	.009	.830	.166	.344	.015
.776	.220	.237	.028	.776	.264	.258	.019	.776	.245	.301	.057
.722	.242	.215	.056	.722	.412	.215	.082	.722	.271	.258	.036
.669	.341	.194	.084	.669	.382	.172	.165	.669	.235	.215	.021
.615	.420	.172	.032	.615	.286	.129	.299	.615	.359	.172	.079
.562	.477	.151	.075	.562	.269	.086	.360	.562	.281	.129	.249
.508	.322	.129	.111	.508	.354	.043	.362	.508	.272	.086	.155
.454	.430	.108	.159	.454	.352	0.000	.316	.454	.196	.043	.249
.401	.361	.086	.178	.401	.272	-.043	.254	.401	.160	0.000	.260
.347	.322	.065	.254	.347	.245	-.086	.341	.347	.119	-.043	.296
.294	.252	.043	.354	.294	.126	-.129	.254	.294	.074	-.086	.264
.240	.185	.022	.395	.240	.104	-.172	.191	.240	.049	-.129	.217
.186	.134	0.000	.316	.186	.091	-.215	.120	.186	.080	-.172	.151
.133	.094	-.022	.337	.133	.063	-.258	.058	.133	.059	-.215	.097
.079	.036	-.043	.283	.079	.014	-.301	.038	.079	.027	-.258	.054
.0000	0.000	-.065	.258	0.000	0.000	-.344	.021	0.000	0.000	-.301	.032
.0000	0.000	-.086	.231	0.000	0.000	-.387	.010	0.000	0.000	-.344	.043
.0000	0.000	-.108	.267	0.000	0.000	-.430	.001	0.000	0.000	-.387	.017
.0000	0.000	-.129	.184	0.000	0.000	-.473	0.000	0.000	0.000	-.430	.002
.0000	0.000	-.151	.147	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.0000	0.000	-.172	.104	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.0000	0.000	-.194	.085	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.0000	0.000	-.215	.064	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.0000	0.000	-.237	.042	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.0000	0.000	-.258	.028	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.0000	0.000	-.279	.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.0000	0.000	-.301	.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MFAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.440222	1.902345	.401647	1.925425	.415144	1.976980	.444444	1.864781				
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A				
.034053	.042629	.013810	.064054	.035984	.078208	.042694	.125124				
VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H				
.031116	.030216	.030697	.072100	.025000	.066715	.050143	.084115				
AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T				
.2512	.1425	.2163	.1392	.1717	.1096	.2221	.1031				

TABLE 6 - continued

LARGE NOZZLE DIAMETER = 1.882CM															
JET STRENGTH = 2.09				STATION 0.25				STATION 0.00				STATION 0.00			
STATION 0.25		HORIZ Y/D = .62		STATION 0.25		HORIZ Y/D = .62		STATION 0.00		HORIZ Y/D = .00		STATION 0.00		HORIZ Y/D = .00	
VERTICAL	DT	HORIZ	Y/D	VERTICAL	DT	HORIZ	Y/D	VERTICAL	DT	HORIZ	Y/D	VERTICAL	DT	HORIZ	Y/D
Y/D	DT	Z/HW	Y/D	Y/D	DT	Z/HW	Y/D	Y/D	DT	Z/HW	Y/D	Y/D	DT	Z/HW	Y/D
.947	1.41	.516	0.000	.937	.057	.559	0.000	.947	0.000	0.000	0.000	.947	0.000	0.000	0.000
.883	1.48	.473	.011	.883	.170	.516	.004	.883	0.000	0.000	0.000	.883	0.000	0.000	0.000
.830	1.42	.430	.026	.830	.147	.473	.004	.830	0.000	0.000	0.000	.830	0.000	0.000	0.000
.776	1.80	.387	.036	.776	.191	.430	.008	.776	0.000	0.000	0.000	.776	0.000	0.000	0.000
.722	2.06	.344	.046	.722	.247	.387	.010	.722	0.000	0.000	0.000	.722	0.000	0.000	0.000
.664	2.06	.301	.045	.664	.232	.344	.046	.664	0.000	0.000	0.000	.664	0.000	0.000	0.000
.615	1.96	.258	.050	.615	.157	.301	.005	.615	0.000	0.000	0.000	.615	0.000	0.000	0.000
.562	2.72	.215	.065	.562	.201	.258	.128	.562	0.000	0.000	0.000	.562	0.000	0.000	0.000
.508	2.06	.172	.153	.508	.196	.215	.126	.508	0.000	0.000	0.000	.508	0.000	0.000	0.000
.454	2.11	.129	.179	.454	.182	.172	.095	.454	0.000	0.000	0.000	.454	0.000	0.000	0.000
.401	2.19	.086	.183	.401	.154	.129	.130	.401	0.000	0.000	0.000	.401	0.000	0.000	0.000
.347	2.39	.043	.185	.347	.137	.086	.135	.347	0.000	0.000	0.000	.347	0.000	0.000	0.000
.294	1.72	0.000	.247	.294	.119	.043	.125	.294	0.000	0.000	0.000	.294	0.000	0.000	0.000
.240	1.41	-.043	.225	.240	.098	0.000	.232	.240	0.000	0.000	0.000	.240	0.000	0.000	0.000
.186	1.28	-.086	.229	.186	.087	-.043	.169	.186	0.000	0.000	0.000	.186	0.000	0.000	0.000
.133	1.08	-.129	.197	.133	.064	-.086	.143	.133	0.000	0.000	0.000	.133	0.000	0.000	0.000
.079	.033	-.172	.183	.079	.019	-.129	.118	.079	0.000	0.000	0.000	.079	0.000	0.000	0.000
0.000	0.000	-.215	.170	0.000	0.000	-.172	.118	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.258	.159	0.000	0.000	-.215	.133	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.301	.113	0.000	0.000	-.258	.074	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.344	.085	0.000	0.000	-.301	.088	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.387	.060	0.000	0.000	-.344	.056	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.430	.024	0.000	0.000	-.387	.028	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.473	.008	0.000	0.000	-.430	.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.516	0.000	0.000	0.000	-.473	.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.516	.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.559	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.425366		2.013321		.404604		1.957041		0.000000		0.000000		0.000000		0.000000	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.044712		.137486		.040454		.147619		0.000000		0.000000		0.000000		0.000000	
VARIANCE H		VARIANCE H		VARIANCE H		VARIANCE H		VARIANCE H		VARIANCE H		VARIANCE H		VARIANCE H	
.040597		.129903		.038011		.088713		0.000000		0.000000		0.000000		0.000000	
AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T	
.1810		.1071		.1442		.0770		0.0000		0.0000		0.0000		0.0000	

LARGE NOZZLE DIAMETER = 1.882CM															
JET STRENGTH = 3.37				STATION 3.25				STATION 5.25				STATION 7.25			
STATION 1.25		HORIZ Y/D = .53		STATION 3.25		HORIZ Y/D = .56		STATION 5.25		HORIZ Y/D = .56		STATION 7.25		HORIZ Y/D = .62	
VERTICAL	DT	HORIZ	Y/D	VERTICAL	DT	HORIZ	Y/D	VERTICAL	DT	HORIZ	Y/D	VERTICAL	DT	HORIZ	Y/D
Y/D	DT	Z/HW	Y/D	Y/D	DT	Z/HW	Y/D	Y/D	DT	Z/HW	Y/D	Y/D	DT	Z/HW	Y/D
.745	0.000	.097	0.000	.938	0.000	.215	0.000	.938	.088	.301	0.000	.938	.210	.387	0.000
.723	0.039	.086	.066	.884	.024	.194	.066	.884	.145	.280	.007	.884	.277	.344	.068
.702	.207	.075	.258	.831	.270	.172	.166	.831	.128	.258	.012	.831	.316	.301	.105
.681	.574	.065	.565	.777	.340	.151	.166	.777	.200	.200	.037	.777	.432	.258	.144
.659	1.057	.054	.899	.723	.621	.129	.270	.723	.249	.215	.078	.723	.488	.215	.287
.638	1.695	.043	2.257	.670	1.009	.108	.205	.670	.422	.194	.084	.670	.531	.172	.305
.616	2.372	.032	2.911	.616	1.380	.086	.381	.616	.639	.172	.085	.616	.611	.129	.352
.595	3.196	.022	3.827	.563	1.325	.065	.882	.563	.708	.151	.102	.563	.540	.086	.529
.573	3.792	.011	4.021	.509	1.283	.043	.429	.509	.592	.129	.215	.509	.462	.043	.418
.552	4.081	0.000	4.190	.456	1.179	.022	1.413	.456	.349	.108	.308	.456	.461	0.000	.482
.531	4.210	-.011	3.301	.402	.815	0.000	1.392	.402	.334	.086	.333	.402	.458	-.043	.355
.509	3.662	-.022	2.710	.348	.645	-.022	1.121	.348	.494	.065	.479	.348	.401	-.086	.415
.488	3.270	-.032	1.920	.295	.385	-.043	.916	.295	.325	.043	.398	.295	.335	-.129	.230
.466	2.649	-.043	1.625	.241	.288	-.065	.654	.241	.019	.022	.412	.241	.237	-.172	.143
.445	2.467	-.054	.796	.188	.149	-.086	.652	.188	.103	0.000	.638	.188	.156	-.215	.250
.423	1.756	-.065	.291	.134	.003	-.104	.466	.134	.021	-.022	.658	.134	.158	-.258	.104
.402	1.225	-.075	.215	.090	.055	-.129	.242	0.000	0.000	-.043	.480	.090	.051	-.301	.039
.380	.608	-.086	.093	0.000	0.000	-.151	.242	0.000	0.000	-.065	.381	0.000	0.000	-.344	.018
.359	.233	-.097	.607	0.000	0.000	-.172	.136	0.000	0.000	-.086	.488	0.000	0.000	-.387	.003
.338	.125	0.000	0.000	0.000	0.000	-.194	.078	0.000	0.000	-.108	.313	0.000	0.000	-.430	0.000
.316	.043	0.000	0.000	0.000	0.000	-.215	.023	0.000	0.000	-.129	.271	0.000	0.000	-.473	0.000
.295	.004	0.000	0.000	0.000	0.000	-.237	0.000	0.000	0.000	-.151	.189	0.000	0.000	0.000	0.000
.273	.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.172	.182	0.000	0.000	0.000	0.000
.252	.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.194	.087	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.215	.078	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.237	.066	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.258	.050	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.280	.025	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.301	.003	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.323	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.344	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.439301		1.930099		.417524		1.92574		.425998		1.960361		.413694		1.889417	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.004743		.001511		.015528		.027166		.024904		.038894		.038273		.082433	
VARIANCE H		VARIANCE H		VARIANCE H		VARIANCE H		VARIANCE H		VARIANCE H		VARIANCE H		VARIANCE H	
.004491		.001529		.015514		.014119		.018002		.026633		.036286		.071156	
AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T	
1.5536		1.5766		.5748		.4591		.3011		.2084		.3602		.2021	

TABLE 6 - continued

LARGE NOZZLE DIAMETER = 1.882CM															
JET STRENGTH = 3.37								FROUDE NO. = 36.00							
STATION 9.25				STATION 11.25				STATION 13.25				STATION 0.00			
VERTICAL	DT	HORIZ	Y/D = .62	VERTICAL	DT	HORIZ	Y/D = .62	VERTICAL	DT	HORIZ	Y/D = .62	VERTICAL	DT	HORIZ	Y/D = 0.00
Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW	
* .938	.220	.430	0.000	* .938	.126	.473	0.000	* .938	.102	.516	0.000	* 0.000	0.000	0.000	0.000
* .884	.230	.387	.012	* .884	.087	.430	.015	* .884	.197	.473	.015	* 0.000	0.000	0.000	0.000
* .831	.271	.344	.035	* .831	.150	.387	.068	* .831	.180	.430	.071	* 0.000	0.000	0.000	0.000
* .777	.361	.301	.050	* .777	.193	.344	.146	* .777	.202	.387	.068	* 0.000	0.000	0.000	0.000
* .723	.414	.258	.125	* .723	.201	.301	.094	* .723	.208	.344	.061	* 0.000	0.000	0.000	0.000
* .670	.405	.215	.199	* .670	.227	.258	.128	* .670	.212	.301	.076	* 0.000	0.000	0.000	0.000
* .616	.459	.172	.337	* .616	.295	.215	.221	* .616	.192	.258	.146	* 0.000	0.000	0.000	0.000
* .563	.414	.129	.390	* .563	.282	.172	.219	* .563	.254	.215	.073	* 0.000	0.000	0.000	0.000
* .509	.418	.086	.454	* .509	.207	.129	.300	* .509	.220	.172	.116	* 0.000	0.000	0.000	0.000
* .456	.374	.043	.528	* .456	.124	.086	.294	* .456	.251	.129	.178	* 0.000	0.000	0.000	0.000
* .402	.297	0.000	.531	* .402	.172	.043	.200	* .402	.200	.086	.281	* 0.000	0.000	0.000	0.000
* .348	.286	-.043	.490	* .348	.175	0.000	.309	* .348	.183	.043	.270	* 0.000	0.000	0.000	0.000
* .295	.211	-.086	.352	* .295	.155	-.043	.321	* .295	.069	0.000	.205	* 0.000	0.000	0.000	0.000
* .241	.212	-.129	.305	* .241	.124	-.086	.287	* .241	.068	-.043	.252	* 0.000	0.000	0.000	0.000
* .188	.152	-.172	.378	* .188	.162	-.129	.317	* .188	.091	-.086	.197	* 0.000	0.000	0.000	0.000
* .134	.115	-.215	.360	* .134	.085	-.172	.280	* .134	.121	-.129	.231	* 0.000	0.000	0.000	0.000
* .080	.075	-.258	.133	* .080	.063	-.215	.178	* .080	.062	-.172	.231	* 0.000	0.000	0.000	0.000
* 0.000	0.000	-.301	.129	* 0.000	0.000	-.258	.155	* 0.000	0.000	-.215	.261	* 0.000	0.000	0.000	0.000
* 0.000	0.000	-.344	.052	* 0.000	0.000	-.301	.121	* 0.000	0.000	-.258	.212	* 0.000	0.000	0.000	0.000
* 0.000	0.000	-.387	.002	* 0.000	0.000	-.344	.055	* 0.000	0.000	-.301	.187	* 0.000	0.000	0.000	0.000
* 0.000	0.000	-.430	0.000	* 0.000	0.000	-.387	.022	* 0.000	0.000	-.344	.156	* 0.000	0.000	0.000	0.000
* 0.000	0.000	0.000	0.000	* 0.000	0.000	-.430	.021	* 0.000	0.000	-.387	.118	* 0.000	0.000	0.000	0.000
* 0.000	0.000	0.000	0.000	* 0.000	0.000	-.473	.007	* 0.000	0.000	-.430	.091	* 0.000	0.000	0.000	0.000
* 0.000	0.000	0.000	0.000	* 0.000	0.000	-.516	.002	* 0.000	0.000	-.473	.053	* 0.000	0.000	0.000	0.000
* 0.000	0.000	0.000	0.000	* 0.000	0.000	0.000	0.000	* 0.000	0.000	-.516	.018	* 0.000	0.000	0.000	0.000
* 0.000	0.000	0.000	0.000	* 0.000	0.000	0.600	0.000	* 0.000	0.000	-.559	.009	* 0.000	0.000	0.000	0.000
* 0.000	0.000	0.000	0.000	* 0.000	0.000	0.000	0.000	* 0.000	0.000	-.602	.003	* 0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.407554		1.956333		.430880		1.927586		.410165		2.047788		0.000000		0.000000	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.040871		.086314		.044585		.132776		.044507		.189146		0.000000		0.000000	
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B	
.042919		.092647		.034889		.151591		.045925		.179096		0.000000		0.000000	
AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T	
.2891		.2315		.1570		.1567		.1653		.1325		0.0000		0.0000	

TABLE 7 - DIFFUSION DATA - 3/4-INCH ROCK ROUGHNESS - SALT

CONCENTRATION DISTRIBUTIONS
INJECTION CONCENTRATION = 2500 MG. PER LITER

VARIANCE A USES BASIC DEFINITION
VARIANCE B USES REFLECTION PRINCIPLE

TABLE 7 - continued

SMALL NOZZLE DIAMETER = .468CM															
JET STRENGTH = 1.10				FROUDE NO. = INF.				STATION 2.00				STATION 3.00			
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	C	HORIZ	Y/D = .54	VERTICAL	C	HORIZ	Y/D = .54	VERTICAL	C	HORIZ	Y/D = .54	VERTICAL	C	HORIZ	Y/D = .54
Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW	
.713	0.000	.088	0.000	.788	0.000	.172	0.000	.949	0.000	.172	0.000	.949	.092	.344	.012
.691	1.501	.075	.488	.734	.463	.151	.394	.845	.087	.124	.124	.845	.256	.301	.086
.670	4.348	.065	1.009	.681	.670	.124	.615	.841	.324	.086	.789	.841	.821	.258	.184
.648	.845	.054	.749	.627	2.047	.104	.886	.788	.624	.043	.555	.788	1.202	.215	.172
.627	3.034	.043	3.840	.573	5.461	.086	4.430	.734	.911	0.000	.836	.734	1.472	.172	.350
.606	2.408	.032	6.465	.520	11.020	.065	6.718	.681	1.135	-.043	.801	.681	1.045	.129	.492
.584	4.352	.022	3.613	.466	7.473	.043	2.239	.627	1.135	-.086	3.430	.627	1.794	.086	.885
.563	10.416	.011	11.614	.413	4.084	.022	6.300	.573	1.797	-.129	2.098	.573	2.136	.043	2.090
.541	20.400	0.000	17.400	.354	3.035	0.000	4.770	.520	2.695	-.172	.830	.520	1.965	0.000	1.254
.520	13.888	-.011	11.521	.305	1.426	-.022	6.664	.466	2.321	-.215	1.028	.466	3.430	-.043	1.211
.498	20.143	-.022	5.488	.252	.463	-.043	5.513	.413	3.880	-.258	.573	.413	2.142	-.086	1.445
.477	7.382	-.032	2.701	.194	.268	-.065	2.830	.354	2.108	-.301	.129	.354	1.426	-.129	.676
.456	5.317	-.043	2.311	.145	.024	-.086	.468	.305	.836	-.344	.006	.305	.972	-.172	.486
.434	3.159	-.054	1.823	.091	.012	-.104	.788	.252	.699	0.000	0.000	.252	1.130	-.215	.375
.413	1.501	-.065	.618	0.000	0.000	-.124	1.304	.194	.237	0.000	0.000	.194	.841	-.258	.369
.391	.156	-.075	.098	0.000	0.000	-.151	.221	.145	.075	0.000	0.000	.145	.565	-.301	.031
.370	.063	-.086	.033	0.000	0.000	-.172	.074	.041	.025	0.000	0.000	.041	.473	-.344	.049
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.387	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.430	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.476523		1.933495		.476941		1.922625		.470754		2.118121		.462025		1.965059	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.002859		.002423		.007687		.012268		.018559		.032187		.031650		.053717	
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B	
.001616		.001095		.004363		.007002		.009417		.011781		.015604		.026124	
AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C	
6.1655		4.1926		2.6070		2.8952		1.1111		.8617		1.2802		.5351	

SMALL NOZZLE DIAMETER = .468CM															
JET STRENGTH = 1.10				FROUDE NO. = INF.				STATION 0.00				STATION 0.00			
STATION 5.00				STATION 0.00				STATION 0.00				STATION 0.00			
VERTICAL	C	HORIZ	Y/D = .54	VERTICAL	C	HORIZ	Y/D = 0.00	VERTICAL	C	HORIZ	Y/D = 0.00	VERTICAL	C	HORIZ	Y/D = 0.00
Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW	
.909	.147	.387	.041	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.895	.301	.344	.145	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.841	.455	.301	.157	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.788	1.275	.258	.453	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.734	1.083	.215	.267	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.681	1.249	.172	.296	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.627	1.640	.129	1.161	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.573	1.416	.086	1.132	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.520	1.525	.043	.749	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.466	.929	0.000	.871	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.413	1.256	-.043	.461	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.359	1.076	-.086	1.190	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.305	.807	-.129	.524	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.252	1.093	-.172	.244	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.194	.365	-.215	.221	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.145	.032	-.258	.024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.091	.128	-.301	.104	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.344	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.387	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.426296		1.815000		0.000000		0.000000		0.000000		0.000000		0.000000		0.000000	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.031274		.014555		0.000000		0.000000		0.000000		0.000000		0.000000		0.000000	
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B	
.031658		.057024		0.000000		0.000000		0.000000		0.000000		0.000000		0.000000	
AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C	
.8886		.4509		0.0000		0.0000		0.0000		0.0000		0.0000		0.0000	

TABLE 7 - continued

SMALL NOZZLE DIAMETER = .468CM															
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
JET STRENGTH = 3.09				FROUDE NO. = INF.											
VERTICAL	HORIZ	Y/D = .55	VERTICAL	HORIZ	Y/D = .55	VERTICAL	HORIZ	Y/D = .55	VERTICAL	HORIZ	Y/D = .55	VERTICAL	HORIZ	Y/D = .55	VERTICAL
C	Z/HW	C	C	Z/HW	C	C	Z/HW	C	C	Z/HW	C	C	Z/HW	C	C
.717	0.000	.086	0.000	.798	0.000	.172	0.000	.841	0.000	.215	0.000	.949	0.000	.258	0.000
.691	2.218	.075	.820	.777	.759	.151	.176	.788	1.305	.194	.159	.895	.504	.215	.050
.670	1.017	.065	2.812	.756	0.000	.129	2.169	.714	.402	.172	.379	.841	1.539	.172	3.473
.648	8.133	.054	5.741	.734	9.647	.108	2.755	.681	3.765	.151	.819	.788	1.274	.129	.933
.627	23.476	.043	27.534	.713	4.315	.086	7.679	.627	3.464	.129	.379	.714	3.290	.086	3.288
.606	15.712	.032	32.334	.691	9.009	.065	2.403	.573	5.471	.108	2.995	.681	4.197	.043	5.128
.584	44.418	.022	12.175	.670	11.401	.043	28.783	.520	8.232	.086	2.849	.627	5.810	0.000	11.040
.563	78.747	.011	94.085	.648	14.509	.022	27.962	.466	12.800	.065	3.284	.573	7.816	-.043	6.709
.541	74.300	0.000	109.200	.627	7.442	0.000	35.700	.413	6.576	.043	5.979	.520	6.598	-.086	5.140
.520	66.638	-.011	99.241	.606	25.889	-.022	26.672	.359	4.518	.022	4.133	.466	5.086	-.129	5.003
.498	67.470	-.022	64.676	.584	32.100	-.043	15.593	.305	.753	0.000	21.700	.413	6.488	-.172	4.306
.477	35.306	-.032	40.774	.563	27.501	-.065	10.903	.252	.301	-.022	15.882	.359	9.200	-.215	1.755
.456	16.267	-.043	23.668	.541	23.281	-.086	8.031	.198	.100	-.043	11.113	.305	5.397	-.258	.249
.434	6.142	-.054	13.826	.520	22.475	-.108	12.369	.145	.050	-.065	6.137	.252	2.767	-.301	.050
.413	2.218	-.065	4.452	.498	16.453	-.129	4.338	0.000	0.000	-.086	3.900	.198	2.456	0.000	0.000
.391	1.571	-.075	1.640	.477	11.095	-.151	1.993	0.000	0.000	-.108	4.352	.145	1.365	0.000	0.000
.370	0.000	-.086	0.000	.456	8.724	-.172	.410	0.000	0.000	-.129	2.506	.091	.229	0.000	0.000
0.000	0.000	0.000	0.000	.434	3.035	0.000	0.000	0.000	0.000	-.151	2.751	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.413	8.061	0.000	0.000	0.000	0.000	-.172	1.455	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.391	3.082	0.000	0.000	0.000	0.000	-.194	.868	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.370	1.517	0.000	0.000	0.000	0.000	-.215	.293	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.348	.759	0.000	0.000	0.000	0.000	-.237	.024	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.327	1.375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.305	1.802	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.284	.095	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	.263	.332	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.430895	1.939468		.409319	1.954421		.461775	1.972502		.481503	1.992681		.481503	1.992681		
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		
.002115	.002257		.006169	.012108		.010163	.016440		.025151	.036213		.025151	.036213		
VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		
.001471	.002037		.003560	.007641		.005528	.005719		.019195	.020115		.019195	.020115		
AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		
25.9549	34.8814		9.2386	11.0552		3.4097	4.3847		3.7656	3.3659		3.7656	3.3659		

SMALL NOZZLE DIAMETER = .468CM															
STATION 5.00				STATION 6.00				STATION 7.00				STATION 8.00			
JET STRENGTH = 3.09				FROUDE NO. = INF.											
VERTICAL	HORIZ	Y/D = .55	VERTICAL	HORIZ	Y/D = .55	VERTICAL	HORIZ	Y/D = .55	VERTICAL	HORIZ	Y/D = .55	VERTICAL	HORIZ	Y/D = .55	VERTICAL
C	Z/HW	C	C	Z/HW	C	C	Z/HW	C	C	Z/HW	C	C	Z/HW	C	C
.949	1.096	.344	0.000	.949	.305	.430	0.000	.949	.540	.516	0.000	0.000	0.000	0.000	0.000
.895	.584	.301	.007	.895	1.376	.387	0.088	.895	.198	.473	.161	0.000	0.000	0.000	0.000
.841	1.054	.258	.129	.841	1.478	.344	.136	.841	.270	.430	.495	0.000	0.000	0.000	0.000
.788	4.072	.215	1.033	.788	1.689	.301	.188	.788	1.144	.387	.610	0.000	0.000	0.000	0.000
.734	4.542	.172	1.122	.734	1.361	.258	.714	.734	1.315	.344	.772	0.000	0.000	0.000	0.000
.681	6.834	.129	2.343	.681	2.409	.215	.839	.681	1.342	.301	.357	0.000	0.000	0.000	0.000
.627	6.891	.086	4.557	.627	2.018	.172	.852	.627	1.684	.258	1.175	0.000	0.000	0.000	0.000
.573	8.400	.043	4.736	.573	2.433	.129	2.517	.573	2.063	.215	.921	0.000	0.000	0.000	0.000
.520	4.428	0.000	8.400	.520	5.130	.086	4.959	.520	2.069	.172	.991	0.000	0.000	0.000	0.000
.466	5.382	-.043	4.478	.466	3.444	.043	3.819	.466	2.360	.129	1.797	0.000	0.000	0.000	0.000
.413	5.866	-.086	3.455	.413	2.018	0.000	5.666	.413	1.765	.086	.841	0.000	0.000	0.000	0.000
.359	5.951	-.129	2.363	.359	3.191	-.043	4.045	.359	1.369	.043	2.580	0.000	0.000	0.000	0.000
.305	4.143	-.172	2.184	.305	2.362	-.086	4.170	.305	1.045	0.000	3.870	0.000	0.000	0.000	0.000
.252	3.332	-.215	.943	.252	2.776	-.129	3.055	.252	.829	-.043	1.785	0.000	0.000	0.000	0.000
.198	.982	-.258	.377	.198	2.424	-.172	2.467	.198	.432	-.086	1.014	0.000	0.000	0.000	0.000
.145	1.011	-.301	.179	.145	1.634	-.215	2.329	.145	.802	-.129	1.970	0.000	0.000	0.000	0.000
.091	.483	-.344	.040	.091	1.275	-.258	.902	.091	.748	-.172	2.234	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.301	.927	0.000	0.000	-.215	1.820	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.344	.250	0.000	0.000	-.258	1.659	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.387	.263	0.000	0.000	-.301	.991	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.430	.159	0.000	0.000	-.344	.680	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.387	.445	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.430	.415	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.473	.311	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.516	.196	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.437441	1.941148		.481973	1.990669		.459495	1.991668		.459495	1.991668		.459495	1.991668		
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		
.024362	.044472		.040443	.071066		.035413	.168002		.035413	.168002		.035413	.168002		
VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		
.023158	.021129		.021103	.050490		.026513	.058023		.026513	.058023		.026513	.058023		
AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		
3.8382	2.1616		2.2545	1.8252		1.7715	1.1255		0.0000	0.0000		0.0000	0.0000		

SMALL NOZZLE DIAMETER = .468CH															
JET STREAM				STATION 2.00				STATION 3.00				STATION 4.00			
STATION 1.00		HORIZ Y/D = .54		VERTICAL		HORIZ Y/D = .54		VERTICAL		HORIZ Y/D = .54		VERTICAL		HORIZ Y/D = .54	
Y/D	C	HORIZ Z/HW	C	Y/D	C	HORIZ Z/HW	C	Y/D	C	HORIZ Z/HW	C	Y/D	C	HORIZ Z/HW	C
.691	0.000	.108	0.000	.449	0.000	.172	0.000	.449	.242	.215	0.000	.449	.698	.344	0.000
.670	8.608	.097	2.363	.885	1.561	.151	.718	.885	.785	.194	.655	.885	1.303	.301	.071
.698	35.006	.086	6.794	.841	.960	.124	1.256	.841	1.329	.172	1.190	.841	3.538	.258	.071
.627	35.006	.075	8.271	.768	.060	.108	2.991	.788	2.175	.151	2.142	.788	4.702	.215	.155
.606	41.842	.065	33.378	.734	1.301	.066	7.179	.734	14.860	.129	7.855	.734	9.078	.172	.988
.584	70.873	.054	44.624	.681	22.328	.065	18.066	.681	11.296	.108	7.474	.681	6.052	.129	5.882
.563	94.132	.043	81.297	.627	22.508	.043	25.723	.627	16.008	.086	3.630	.627	4.217	.086	6.561
.541	171.300	.032	103.678	.573	34.735	.072	43.071	.573	30.686	.065	6.903	.573	24.300	.043	11.729
.520	143.140	.022	153.893	.520	53.600	0.000	53.600	.520	35.700	.043	8.926	.520	22.484	0.000	24.100
.498	112.478	.011	174.000	.466	42.496	.022	32.244	.466	24.887	.022	18.387	.466	15.409	.043	17.765
.477	56.813	0.000	160.482	.413	31.572	.043	26.920	.413	22.109	0.000	31.300	.413	7.588	.086	6.918
.456	20.659	.011	128.195	.359	12.665	.065	15.434	.359	11.846	.022	22.493	.359	7.262	.129	6.632
.434	12.912	.022	90.682	.305	3.781	.086	6.700	.305	5.135	.043	18.030	.305	5.074	.172	3.608
.413	6.313	.032	54.371	.252	1.140	.108	13.280	.252	2.899	.065	11.009	.252	3.072	.215	.869
.391	2.582	.043	43.421	.198	.360	.124	4.128	.198	1.269	.086	5.296	.198	5.493	.258	.226
.370	1.148	.054	47.851	.145	0.000	.151	1.795	.145	2.054	.108	2.380	.145	1.583	.301	.036
.348	.247	.065	17.427	0.000	0.000	.172	.060	.091	1.148	.129	3.154	.091	.512	.344	.024
0.000	0.000	.075	10.043	0.000	0.000	0.000	0.000	0.000	0.000	.151	4.939	.038	.047	0.000	0.000
0.000	0.000	.086	7.384	0.000	0.000	0.000	0.000	0.000	0.000	.172	1.964	0.000	0.000	0.000	0.000
0.000	0.000	.097	2.954	0.000	0.000	0.000	0.000	0.000	0.000	.194	1.726	0.000	0.000	0.000	0.000
0.000	0.000	.108	2.068	0.000	0.000	0.000	0.000	0.000	0.000	.215	2.142	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.237	1.190	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.258	.238	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.280	.238	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN</											

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TABLE 7 - continued

SMALL NOZZLE DIAMETER = .468CM JET STRENGTH = 9.05 FROUDE NO. = INF.											
STATION 1.00				STATION 3.00				STATION 5.00			
VERTICAL	HORIZ	Y/D = .54		VERTICAL	HORIZ	Y/D = .54		VERTICAL	HORIZ	Y/D = .54	
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.777	0.000	.086	0.000	.895	0.000	.215	0.000	.949	2.555	.344	0.000
.756	2.790	.075	.608	.841	3.435	.194	.838	.895	1.486	.301	1.197
.734	4.030	.065	3.649	.788	1.540	.172	1.077	.841	7.012	.258	2.194
.713	4.030	.054	20.373	.734	17.650	.151	5.387	.788	19.729	.215	5.785
.691	5.489	.043	80.276	.681	26.061	.129	2.514	.734	25.612	.172	10.771
.670	9.919	.032	117.981	.627	24.639	.108	2.155	.681	21.155	.129	19.249
.648	61.994	.022	92.743	.573	34.471	.086	7.782	.627	31.198	.086	24.135
.627	73.153	.011	150.517	.520	50.700	.065	9.099	.573	37.200	.043	17.553
.606	147.546	0.000	194.000	.466	31.273	.043	32.564	.520	36.546	0.000	37.400
.584	163.044	-.011	139.266	.413	33.524	.022	38.430	.466	31.139	-.043	25.133
.563	208.300	-.022	114.636	.359	15.992	0.000	68.600	.413	30.010	-.086	14.960
.541	191.252	-.032	140.179	.305	13.267	-.022	52.438	.359	28.286	-.129	16.157
.520	191.562	-.043	72.674	.252	4.501	-.043	46.092	.305	21.155	-.172	13.065
.498	141.656	-.054	28.279	.198	3.198	-.065	31.008	.252	16.817	-.215	2.992
.477	85.242	-.065	9.730	.145	1.185	-.086	33.043	.198	14.263	-.258	.798
.456	44.326	-.075	5.169	0.000	0.000	-.108	13.289	.145	7.428	-.301	5.585
.434	13.949	-.086	.608	0.000	0.000	-.129	11.014	.108	3.328	-.344	.199
.413	3.720	0.000	0.000	0.000	0.000	-.151	8.859	0.000	0.000	-.387	.199
.391	1.860	0.000	0.000	0.000	0.000	-.172	6.859	0.000	0.000	0.000	0.000
.370	0.000	0.000	0.000	0.000	0.000	-.194	4.071	0.000	0.000	0.000	0.000
.348	1.550	0.000	0.000	0.000	0.000	-.215	.958	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.416939	1.940731	.445402	1.944146	.458674	1.937879	.436460	1.922826	.436460	1.922826	.436460	1.922826
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.002637	.002922	.015481	.016156	.029728	.055854	.028613	.073617	.028613	.073617	.028613	.073617
VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B
.002694	.002514	.010532	.008266	.031676	.030750	.027067	.055813	.027067	.055813	.027067	.055813
AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C
64.5624	68.8641	17.4291	17.8897	19.6976	10.9651	10.7712	6.9878	10.7712	6.9878	10.7712	6.9878

SMALL NOZZLE DIAMETER = .468CM JET STRENGTH = 9.05 FROUDE NO. = INF.											
STATION 9.00				STATION 11.00				STATION 0.00			
VERTICAL	HORIZ	Y/D = .54		VERTICAL	HORIZ	Y/D = .54		VERTICAL	HORIZ	Y/D = 0.00	
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.949	1.758	.516	0.000	.949	3.304	.602	0.000	0.000	0.000	0.000	0.000
.895	1.260	.473	1.721	.895	1.843	.559	.070	0.000	0.000	0.000	0.000
.841	1.641	.430	1.341	.841	5.073	.516	.140	0.000	0.000	0.000	0.000
.788	3.516	.387	1.247	.788	4.766	.473	.561	0.000	0.000	0.000	0.000
.734	2.227	.344	4.238	.734	8.771	.430	.456	0.000	0.000	0.000	0.000
.681	4.131	.301	3.965	.681	7.247	.387	1.203	0.000	0.000	0.000	0.000
.627	5.860	.258	4.594	.627	5.650	.344	2.921	0.000	0.000	0.000	0.000
.573	10.430	.215	3.205	.573	10.220	.301	3.926	0.000	0.000	0.000	0.000
.520	6.856	.172	4.582	.520	5.687	.258	3.669	0.000	0.000	0.000	0.000
.466	6.065	.129	6.553	.466	8.304	.215	5.129	0.000	0.000	0.000	0.000
.413	10.078	.086	6.885	.413	8.599	.172	4.884	0.000	0.000	0.000	0.000
.359	7.705	.043	10.720	.359	7.615	.129	5.059	0.000	0.000	0.000	0.000
.305	7.559	0.000	8.429	.305	8.795	.086	7.817	0.000	0.000	0.000	0.000
.252	4.805	-.043	4.392	.252	7.690	.043	8.950	0.000	0.000	0.000	0.000
.198	3.574	-.086	4.998	.198	6.326	0.000	6.894	0.000	0.000	0.000	0.000
.145	4.336	-.129	4.487	.145	5.958	-.043	7.641	0.000	0.000	0.000	0.000
.091	8.203	-.172	4.167	.091	6.265	-.086	5.223	0.000	0.000	0.000	0.000
0.000	0.000	-.215	1.175	0.000	0.000	-.129	8.553	0.000	0.000	0.000	0.000
0.000	0.000	-.258	2.362	0.000	0.000	-.172	4.580	0.000	0.000	0.000	0.000
0.000	0.000	-.301	1.330	0.000	0.000	-.215	6.987	0.000	0.000	0.000	0.000
0.000	0.000	-.344	.356	0.000	0.000	-.258	5.048	0.000	0.000	0.000	0.000
0.000	0.000	-.387	2.196	0.000	0.000	-.301	4.265	0.000	0.000	0.000	0.000
0.000	0.000	-.430	.443	0.000	0.000	-.344	3.657	0.000	0.000	0.000	0.000
0.000	0.000	-.473	.107	0.000	0.000	-.387	3.108	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.430	2.477	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.473	1.764	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.516	1.390	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.559	.865	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.602	.526	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.645	.054	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.688	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.731	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.518703	1.422734	.431542	2.024644	.431542	2.024644	.431542	2.024644	.431542	2.024644	.431542	2.024644
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.040854	.145420	.047441	.198518	.047441	.198518	.047441	.198518	.047441	.198518	.047441	.198518
VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B
.026440	.066491	.041882	.160404	.041882	.160404	.041882	.160404	.041882	.160404	.041882	.160404
AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C
5.2943	3.4194	6.5449	3.3674	3.3674	3.3674	3.3674	3.3674	3.3674	3.3674	3.3674	3.3674

TABLE 7 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM											
JET STRENGTH = 1.48				FROUDE NO. = INF.							
STATION 1.00				STATION 2.00				STATION 3.00			
VERTICAL	HORIZ	Y/D = .56		VERTICAL	HORIZ	Y/D = .56		VERTICAL	HORIZ	Y/D = .56	
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.756	0.000	.097	0.000	.841	0.000	.172	0.000	.895	0.000	.215	0.000
.734	4.422	.046	3.489	.788	.392	.151	1.341	.841	1.324	.194	1.120
.713	1.658	.075	5.132	.734	1.176	.129	1.743	.788	2.374	.172	2.123
.691	7.370	.065	8.621	.681	9.493	.104	7.643	.734	.365	.151	5.135
.670	7.370	.054	22.989	.627	21.553	.086	10.861	.681	11.369	.129	5.945
.648	6.265	.043	55.626	.573	31.153	.065	50.150	.627	11.369	.108	5.057
.627	29.297	.032	64.247	.520	51.881	.043	59.000	.573	20.724	.086	7.644
.606	73.150	.022	80.053	.466	57.800	.022	55.782	.520	32.600	.065	9.420
.584	120.688	.011	104.405	.413	24.100	0.000	52.564	.466	26.710	.043	10.964
.562	146.300	0.000	136.500	.359	11.756	-.022	-1.702	.413	18.994	.022	16.485
.541	123.084	-.011	81.489	.305	3.419	-.043	29.098	.359	17.031	0.000	28.800
.520	114.792	-.022	87.853	.252	1.372	-.065	24.270	.305	11.232	-.022	20.577
.498	74.624	-.032	63.837	.198	.392	-.086	22.930	.252	8.995	-.043	13.126
.477	52.329	-.043	32.226	.145	.588	-.104	11.666	.198	1.644	-.065	11.891
.456	23.585	-.054	4.853	0.000	0.000	-.129	1.509	.145	.864	-.086	11.427
.434	11.240	-.065	10.879	0.000	0.000	-.151	4.961	.104	.046	-.108	10.346
.413	2.580	-.075	6.774	0.000	0.000	-.172	.670	0.000	0.000	-.129	7.914
.391	.369	-.086	0.000	0.000	0.000	-.194	.134	0.000	0.000	-.151	5.328
.370	.921	-.097	.821	0.000	0.000	0.000	0.000	0.000	0.000	-.172	2.857
0.000	0.000	-.108	1.232	0.000	0.000	0.000	0.000	0.000	0.000	-.194	1.081
0.000	0.000	-.118	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.215	.193
0.000	0.000	-.129	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.420312		1.933339		.461612		1.935686		.485169		1.955822	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.002299		.003284		.007104		.012897		.014413		.024550	
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B	
.001902		.002262		.005649		.011580		.010270		.010476	
AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C	
42.1076		35.5012		15.5766		21.2236		10.3530		8.4492	

MEDIUM NOZZLE DIAMETER = 1.094CM											
JET STRENGTH = 1.48				FROUDE NO. = INF.							
STATION 5.00				STATION 6.00				STATION 8.00			
VERTICAL	HORIZ	Y/D = .56		VERTICAL	HORIZ	Y/D = .56		VERTICAL	HORIZ	Y/D = .56	
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.949	1.103	.387	0.000	.949	2.641	.430	0.000	.949	7.100	.473	0.000
.895	3.161	.344	.947	.895	2.949	.387	.954	.895	4.319	.430	.651
.841	3.051	.301	1.776	.841	5.810	.344	2.036	.841	4.674	.387	1.357
.788	2.463	.258	.059	.788	5.061	.301	2.036	.788	4.142	.344	1.900
.734	5.367	.215	.888	.734	6.294	.258	3.562	.734	4.023	.301	1.465
.681	3.676	.172	.237	.681	7.462	.215	8.142	.681	5.739	.258	1.900
.627	7.903	.129	3.137	.627	11.135	.172	5.343	.627	4.023	.215	3.256
.573	4.190	.086	4.617	.573	13.600	.129	9.669	.573	6.567	.172	2.334
.520	16.100	.043	12.016	.520	10.387	.086	10.114	.520	4.082	.129	3.908
.466	11.248	0.000	16.100	.466	8.935	.043	11.068	.466	4.497	.086	4.071
.413	9.778	-.043	8.168	.413	9.287	0.000	13.040	.413	3.136	.043	6.350
.359	7.682	-.065	13.200	.359	8.627	-.043	7.442	.359	5.621	0.000	5.644
.305	6.175	-.129	6.624	.305	9.194	-.086	7.374	.305	.764	-.043	4.559
.252	4.154	-.172	5.150	.252	5.502	-.129	4.135	.252	3.254	-.086	4.722
.198	3.529	-.215	4.524	.198	6.662	-.172	3.562	.198	2.424	-.129	2.985
.145	1.323	-.258	2.723	.145	4.157	-.215	4.516	.145	3.550	-.172	3.148
.091	.588	-.301	.710	.091	4.401	-.258	1.272	.091	1.597	-.215	1.574
0.000	0.000	-.344	.355	0.000	0.000	-.301	1.272	0.000	0.000	-.258	1.791
0.000	0.000	-.387	0.000	0.000	0.000	-.344	1.272	0.000	0.000	-.301	1.357
0.000	0.000	-.430	.237	0.000	0.000	-.387	.445	0.000	0.000	-.344	1.791
0.000	0.000	-.473	0.000	0.000	0.000	-.430	.254	0.000	0.000	-.387	.923
0.000	0.000	-.516	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.430	.868
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.473	.326
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.516	.109
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.459149		2.023084		.463371		1.870692		.387191		1.926468	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.030023		.070045		.040998		.092295		.053487		.148007	
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B	
.012612		.031150		.050334		.081645		.033925		.088846	
AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C	
5.3818		3.8851		7.1922		4.6435		4.0895		2.3745	

TABLE 7 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM															
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	HORIZ	Y/D = .55		VERTICAL	HORIZ	Y/D = .55		VERTICAL	HORIZ	Y/D = .55		VERTICAL	HORIZ	Y/D = .55	
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.734	0.000	.097	0.000	.841	0.000	.124	0.000	.845	0.000	.258	0.000	.449	0.000	.258	0.000
.713	5.248	.086	6.668	.788	2.658	.108	.504	.841	1.473	.237	3.396	.845	2.705	.237	.559
.691	3.195	.075	4.599	.734	17.498	.086	2.950	.788	2.661	.215	3.596	.841	3.665	.215	2.189
.670	19.623	.065	2.989	.681	5.316	.065	58.049	.734	20.857	.194	2.897	.788	6.894	.194	2.748
.648	73.474	.054	14.085	.627	61.567	.043	101.833	.681	47.889	.172	2.597	.734	14.836	.172	5.449
.627	141.700	.043	58.405	.573	134.000	.022	141.000	.627	55.681	.151	8.790	.681	33.555	.151	16.486
.606	164.081	.032	93.587	.520	119.382	0.003	118.517	.573	73.069	.129	14.377	.627	24.647	.129	13.878
.584	237.991	.022	225.344	.466	52.271	-.022	140.288	.520	78.000	.108	29.066	.573	49.001	.108	3.586
.563	299.600	.011	315.481	.413	52.271	-.043	73.552	.466	46.841	.086	23.572	.520	70.600	.086	21.236
.541	280.889	0.000	304.123	.354	15.283	-.065	45.169	.413	14.336	.065	44.947	.466	41.540	.065	18.209
.520	248.716	-.011	321.000	.305	6.866	-.086	54.630	.359	25.037	.043	56.034	.413	29.278	.043	20.863
.498	164.289	-.022	274.552	.252	5.980	-.108	12.310	.305	27.175	.022	85.500	.359	25.875	.022	31.109
.477	96.976	-.032	167.398	.198	2.215	-.129	5.749	.252	8.314	0.000	84.801	.305	24.304	0.000	44.800
.456	51.340	-.043	72.202	.145	1.329	-.151	8.037	.198	2.851	-.022	78.608	.252	15.577	-.022	35.346
.434	24.643	-.054	55.646	0.000	0.000	-.172	1.323	.145	2.423	-.043	55.136	.198	19.243	-.043	30.270
.413	16.201	-.065	30.122	0.000	0.000	0.000	0.000	.041	1.378	-.065	33.361	.145	7.898	-.065	29.013
.391	4.564	-.075	9.888	0.000	0.000	0.000	0.000	0.000	0.000	-.086	25.470	.091	.567	-.086	24.263
.370	1.369	-.086	5.599	0.000	0.000	0.000	0.000	0.000	0.000	-.108	22.274	0.000	0.000	-.108	15.182
.348	.913	-.097	.920	0.000	0.000	0.000	0.000	0.000	0.000	-.129	5.493	0.000	0.000	-.129	21.608
.327	.456	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.151	4.794	0.000	0.000	-.151	10.664
.305	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.172	4.695	0.000	0.000	-.172	7.125
.284	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.194	2.797	0.000	0.000	-.194	2.422
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.215	.899	0.000	0.000	-.215	1.909
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.237	.300	0.000	0.000	-.237	.047
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.258	.047
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.416595	1.945518		.439879	1.952297		.439029	1.922121		.474240		1.953028				
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A		VARIANCE A				
.002545	.002505		.008216	.008509		.015106	.019439		.022336		.029810				
VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B		VARIANCE B				
.002402	.002603		.005062	.008098		.011121	.013573		.010926		.017741				
AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C		AVERAGE C				
83.6486	33.7405		34.1882	50.9336		24.3303	24.9750		21.7786		14.3602				

MEDIUM NOZZLE DIAMETER = 1.094CM															
STATION 5.00				STATION 6.00				STATION 8.00				STATION 10.00			
VERTICAL	HORIZ	Y/D = .55		VERTICAL	HORIZ	Y/D = .84		VERTICAL	HORIZ	Y/D = .55		VERTICAL	HORIZ	Y/D = .55	
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.4949	.520	.344	0.000	.4949	3.676	.387	.095	.4949	4.201	.430	0.000	.4949	5.421	.516	0.000
.4895	2.220	.301	.557	.4895	2.166	.344	.427	.4895	2.258	.387	.491	.4895	2.218	.473	.314
.4841	12.139	.258	3.190	.4841	3.022	.301	1.899	.4841	4.201	.344	3.980	.4841	2.907	.430	4.035
.4788	6.660	.215	4.672	.4788	7.000	.258	.712	.4788	14.441	.301	2.358	.4788	8.772	.387	2.556
.4734	22.624	.172	4.153	.4734	3.122	.215	4.652	.4734	13.128	.258	3.144	.4734	8.476	.344	.583
.4681	15.539	.129	8.660	.4681	9.612	.172	6.551	.4681	14.493	.215	4.176	.4681	13.256	.301	.628
.4627	28.528	.086	23.953	.4627	25.433	.129	14.005	.4627	13.863	.172	9.040	.4627	11.679	.258	6.636
.4573	35.424	.043	34.740	.4573	34.800	.086	13.340	.4573	8.454	.129	12.430	.4573	15.424	.215	7.174
.4520	41.800	0.000	39.500	.4520	28.505	.043	23.167	.4520	23.000	.086	13.266	.4520	17.100	.172	11.524
.4466	34.013	-.043	31.347	.4466	26.742	0.000	31.000	.4466	18.957	.043	16.263	.4466	10.891	.129	5.874
.4413	26.166	-.086	30.131	.4413	30.620	-.043	24.059	.4413	17.486	0.000	14.052	.4413	14.291	.086	13.541
.4359	22.955	-.129	27.024	.4359	26.138	-.086	22.550	.4359	9.032	-.043	16.705	.4359	12.123	.043	11.165
.4305	19.271	-.172	10.381	.4305	17.622	-.129	23.167	.4305	10.030	-.086	14.800	.4305	14.045	0.000	13.900
.4252	17.665	-.215	5.469	.4252	11.130	-.172	18.277	.4252	14.021	-.129	17.982	.4252	16.262	-.043	11.568
.4198	8.880	-.258	1.519	.4198	7.705	-.215	8.355	.4198	12.813	-.172	8.352	.4198	16.164	-.086	11.748
.4145	3.637	-.301	1.063	.4145	7.605	-.258	8.640	.4145	6.669	-.215	11.448	.4145	10.595	-.129	13.407
.4091	.472	-.344	.354	.4091	2.417	-.301	7.548	.4091	3.151	-.258	9.925	.4091	3.942	-.172	9.013
0.000	0.000	0.000	0.000	0.000	0.000	-.344	3.086	0.000	0.000	-.301	7.714	0.000	0.000	-.215	5.022
0.000	0.000	0.000	0.000	0.000	0.000	-.387	1.187	0.000	0.000	-.344	8.107	0.000	0.000	-.258	7.578
0.000	0.000	0.000	0.000	0.000	0.000	-.430	.142	0.000	0.000	-.387	3.537	0.000	0.000	-.301	3.587
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.430	1.228	0.000	0.000	-.344	2.063
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.473	.246	0.000	0.000	-.387	3.811
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.430	1.166
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.473	.807
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.516	1.480
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.559	.269
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.456683	1.955430		.444102	2.028267		.444041	2.045811		.447946		1.963203				
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A		VARIANCE A				
.024443	.043820		.025297	.029739		.038742	.115431		.041882		.150288				
VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B		VARIANCE B				
.020904	.016457		.017348	.052057		.026167	.045572		.043543		.127533				
AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C		AVERAGE C				
17.8536	13.3365		14.4538	10.6435		11.1880	8.3747		10.7980		5.7480				

TABLE 7 - continued

MEDIUM NOZZLE DIAMETER = 1.044CM											
JET STRENGTH = 3.11						FROTH NO. = INF.					
STATION 0.00						STATION 0.00					
VERTICAL		HORIZ		VERTICAL		HORIZ		VERTICAL		HORIZ	
Y/D	C	Y/D	C	Y/D	C	Y/D	C	Y/D	C	Y/D	C
0.949	6.140	0.559	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.895	6.371	0.516	0.225	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.841	6.750	0.473	0.541	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.788	6.024	0.430	0.856	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.734	7.588	0.387	1.452	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.601	8.051	0.344	4.056	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.627	8.572	0.301	6.368	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.573	10.078	0.258	6.265	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.520	6.024	0.215	7.482	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.466	8.167	0.172	7.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.413	8.842	0.129	6.580	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.359	2.491	0.086	9.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.305	5.908	0.043	12.800	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.252	4.576	0.000	11.358	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.198	5.387	-0.043	11.177	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.145	11.700	-0.086	12.394	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.091	6.514	-0.129	7.687	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-0.172	9.149	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-0.215	9.056	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-0.258	6.220	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-0.301	4.417	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-0.344	1.668	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-0.387	3.335	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-0.430	2.475	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-0.473	1.664	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-0.516	0.766	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-0.559	0.451	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
0.45908	1.96254	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
0.059676	0.165069	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B
0.036379	0.129151	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C
7.0118	5.1330	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

MEDIUM NOZZLE DIAMETER = 1.094CM													
JET STRENGTH = 5.10				FROUDE NO. = INF.									
STATION 1.00		STATION 3.00		STATION 5.00		STATION 7.00		STATION 1.00		STATION 3.00		STATION 5.00	
Y/D	C	Y/D	C	Y/D	C	Y/D	C	Y/D	C	Y/D	C	Y/D	C
.734	0.000	.895	0.000	.237	0.000	.949	0.000	.301	0.000	.949	0.000	.387	0.000
.713	1.589	.841	1.584	.215	1.882	.895	.691	.258	2.441	.895	10.454	.344	1.937
.691	2.780	.788	1.981	.194	2.719	.841	4.834	.215	1.332	.841	13.079	.301	.792
.670	9.532	.734	10.695	.172	9.412	.788	12.949	.172	6.214	.788	14.829	.258	.748
.648	11.914	.681	76.342	.151	2.301	.734	26.243	.129	9.764	.734	9.211	.215	3.874
.627	184.078	.627	222.901	.129	24.263	.681	28.833	.086	36.062	.681	30.902	.172	8.805
.606	212.472	.573	60.611	.108	17.989	.627	41.523	.043	49.710	.627	35.600	.129	9.861
.584	301.634	.520	107.200	.086	51.245	.573	62.500	0.000	64.800	.573	29.981	.086	23.025
.563	334.165	.466	71.104	.065	70.408	.520	32.459	-.043	42.164	.520	23.810	.043	23.201
.541	390.000	.433	31.081	.043	82.829	.466	44.631	-.086	31.179	.466	21.646	0.000	36.100
.520	337.775	.352	35.057	.022	92.012	.433	40.419	-.129	24.633	.433	22.659	-.043	26.679
.498	186.646	.255	116.600	0.000	105.000	.352	31.185	-.172	13.759	.352	14.631	-.086	19.151
.477	132.944	.205	10.499	-.022	91.287	.255	17.869	-.215	7.565	.255	16.356	-.129	17.742
.456	66.920	.198	6.536	-.043	55.428	.205	11.395	-.258	4.438	.205	8.704	-.172	10.522
.434	28.198	.145	2.575	-.065	35.119	.198	7.006	-.301	1.899	.198	6.908	-.215	5.943
.413	15.085	0.000	0.000	-.086	20.958	.145	6.129	-.344	.888	.145	12.527	-.258	4.711
.391	3.574	0.000	0.000	-.108	26.145	.091	.518	0.000	0.000	0.000	0.000	-.301	6.780
.370	.199	0.000	0.000	-.129	34.512	0.000	0.000	0.000	0.000	0.000	0.000	-.344	3.126
.348	.199	0.000	0.000	-.151	19.771	0.000	0.000	0.000	0.000	0.000	0.000	-.387	1.733
0.000	0.000	0.000	0.000	-.172	1.940	0.000	0.000	0.000	0.000	0.000	0.000	-.430	.528
0.000	0.000	0.000	0.000	-.194	5.229	0.000	0.000	0.000	0.000	0.000	0.000	-.473	0.000
0.000	0.000	0.000	0.000	-.215	3.974	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	-.237	2.719	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.000647	1.977172	.455069	1.979904	.455069	1.977172	1.971425		.422100	1.974657				
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A				
.002124	.002789	.011181	.027338	.022596	.036489	.033905		.033905	.067347				
VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H		VARIANCE H	VARIANCE H				
.002078	.002870	.009999	.015615	.014977				.023120	.022346				
AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C				
.7.2634	.3.6098	.2.9707	33.7117	22.5108	18.5509	17.1984		9.7504					

TABLE 7 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM											
JET STRENGTH = 5.10				FROUDE NO. = INF.				STATION 1.00			
STATION 0.00				STATION 1.00				STATION 1.00			
VERTICAL	Y/D	C	HORIZ Y/D = .54	VERTICAL	Y/D	C	HORIZ Y/D = .54	VERTICAL	Y/D	C	HORIZ Y/D = .54
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.949	3.469	.516	0.000	.949	17.154	.559	0.000	.949	4.594	.774	0.000
.895	7.117	.473	1.147	.895	8.725	.516	.362	.895	8.044	.731	.252
.841	11.085	.430	.824	.841	19.054	.473	.905	.841	10.321	.688	.671
.788	12.999	.387	3.694	.788	8.424	.430	.770	.788	6.249	.645	1.217
.734	13.996	.344	1.975	.734	10.744	.387	1.227	.734	6.814	.602	1.301
.681	18.103	.301	4.586	.681	11.889	.344	7.153	.681	6.652	.559	1.636
.627	20.444	.258	2.866	.627	15.255	.301	5.478	.627	10.160	.516	2.224
.573	22.090	.215	2.293	.573	20.300	.258	9.191	.573	9.273	.473	2.643
.520	19.538	.172	19.873	.520	12.702	.215	14.035	.520	6.007	.430	6.461
.466	22.700	.129	23.377	.466	12.406	.172	10.232	.466	6.531	.387	11.244
.413	28.351	.086	11.593	.413	5.461	.129	11.952	.413	12.700	.344	8.013
.359	22.449	.043	21.976	.359	5.461	.086	13.492	.359	10.603	.301	4.405
.305	18.900	0.000	24.600	.305	6.826	.043	10.685	.305	9.475	.258	8.643
.252	21.373	-.043	26.243	.252	14.542	0.000	18.200	.252	7.257	.215	7.426
.198	15.072	-.086	15.224	.198	17.332	-.043	11.409	.198	11.289	.172	9.859
.145	10.527	-.129	10.829	.145	15.551	-.086	11.545	.145	8.184	.129	13.299
.091	8.453	-.172	4.172	.091	14.542	-.129	4.210	.091	8.386	.086	9.985
0.000	0.000	-.215	10.128	0.000	0.000	-.172	6.565	0.000	0.000	.043	14.474
0.000	0.000	-.258	4.427	0.000	0.000	-.215	2.852	0.000	0.000	0.000	10.992
0.000	0.000	-.301	4.013	0.000	0.000	-.258	3.074	0.000	0.000	-.043	11.076
0.000	0.000	-.344	2.420	0.000	0.000	-.301	1.856	0.000	0.000	-.086	8.517
0.000	0.000	-.387	1.720	0.000	0.000	-.344	1.403	0.000	0.000	-.129	14.000
0.000	0.000	-.430	.382	0.000	0.000	-.387	.815	0.000	0.000	-.172	8.433
0.000	0.000	-.473	.191	0.000	0.000	-.430	.589	0.000	0.000	-.215	8.768
0.000	0.000	-.516	0.000	0.000	0.000	-.473	.407	0.000	0.000	-.258	5.748
0.000	0.000	0.000	0.000	0.000	0.000	-.516	.407	0.000	0.000	-.301	10.627
0.000	0.000	0.000	0.000	0.000	0.000	-.559	.272	0.000	0.000	-.344	4.993
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.387	4.279
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.430	1.930
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.473	1.636
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.516	1.007
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.559	.503
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.602	.252
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.645	.084
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.688	.252
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.731	.336
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.774	.629
MEAN	1.928260	MEAN	1.928260	MEAN	1.819067	MEAN	1.819067	MEAN	1.862668	MEAN	0.000000
VARIANCE A	.038880	VARIANCE A	.038880	VARIANCE A	.122163	VARIANCE A	.122163	VARIANCE A	.266599	VARIANCE A	0.000000
VARIANCE B	.031082	VARIANCE B	.031082	VARIANCE B	.074028	VARIANCE B	.074028	VARIANCE B	.202246	VARIANCE B	0.000000
AVERAGE C	16.8316	AVERAGE C	8.5023	AVERAGE C	12.8455	AVERAGE C	5.5217	AVERAGE C	5.3463	AVERAGE C	0.0000

MEDIUM NOZZLE DIAMETER = 1.094CM											
JET STRENGTH = 7.90				FROUDE NO. = INF.				STATION 3.00			
STATION 1.00				STATION 3.00				STATION 5.00			
VERTICAL	Y/D	C	HORIZ Y/D = .54	VERTICAL	Y/D	C	HORIZ Y/D = .54	VERTICAL	Y/D	C	HORIZ Y/D = .54
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.713	0.000	.086	0.000	.949	0.000	.215	0.000	.949	0.000	.344	0.000
.691	.585	.075	6.624	.895	.473	.194	2.073	.751	5.885	.301	1.356
.670	11.109	.065	6.235	.841	17.182	.172	6.812	.641	9.612	.258	4.430
.648	47.751	.054	70.726	.788	6.484	.151	16.882	.615	28.346	.215	6.420
.627	128.831	.043	123.137	.734	45.062	.129	42.944	.581	38.351	.172	11.844
.606	174.136	.032	167.170	.681	106.334	.108	54.199	.551	52.573	.129	20.615
.584	270.575	.022	274.201	.627	162.095	.086	97.143	.521	66.697	.086	34.624
.563	362.909	.011	342.133	.573	163.716	.065	92.700	.491	76.015	.043	63.381
.541	387.466	0.000	409.000	.520	170.200	.043	138.902	.461	81.900	0.000	78.300
.520	390.000	-.011	347.744	.466	145.562	.022	179.000	.430	53.554	-.043	55.606
.498	336.492	-.022	301.507	.413	144.205	0.000	163.760	.400	61.695	-.086	37.342
.477	291.574	-.032	234.973	.359	98.230	-.022	157.551	.370	56.889	-.129	25.859
.456	214.876	-.043	192.304	.305	55.437	-.043	133.275	.340	47.669	-.172	16.727
.434	162.159	-.054	74.299	.252	12.908	-.065	99.216	.310	30.896	-.215	10.398
.413	114.993	-.065	38.967	.198	8.753	-.086	76.707	.280	21.977	-.258	5.606
.391	37.031	-.075	4.183	.145	5.117	-.104	73.746	.250	14.320	-.301	4.159
.370	17.151	-.086	1.364	.091	0.000	-.129	28.134	.220	7.651	-.344	.542
.348	8.381	0.000	0.000	.043	0.000	-.151	20.732	0.000	0.000	0.000	0.000
.327	2.474	0.000	0.000	0.000	0.000	-.172	15.697	0.000	0.000	0.000	0.000
.305	.585	0.000	0.000	0.000	0.000	-.194	15.697	0.000	0.000	0.000	0.000
.284	0.000	0.000	0.000	0.000	0.000	-.215	9.477	0.000	0.000	0.000	0.000
.263	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	1.943444	MEAN	1.943444	MEAN	1.943444	MEAN	1.943444	MEAN	1.943444	MEAN	1.943444
VARIANCE A	.003108	VARIANCE A	.003108	VARIANCE A	.003108	VARIANCE A	.003108	VARIANCE A	.003108	VARIANCE A	.003108
VARIANCE B	.003686	VARIANCE B	.003686	VARIANCE B	.003686	VARIANCE B	.003686	VARIANCE B	.003686	VARIANCE B	.003686
AVERAGE C	44.8903	AVERAGE C	22.9240	AVERAGE C	63.4693	AVERAGE C	67.4133	AVERAGE C	38.4719	AVERAGE C	22.1894

TABLE 7 - continued

MEDIUM NOZZLE DIAMETER = 1.029CM											
JET STRENGTH = 1.50 FROUDE NO. = INF.											
STATION 0.00				STATION 11.00				STATION 14.00			
VERTICAL	HORIZ	Y/D = .50	VERTICAL	HORIZ	Y/D = .50	VERTICAL	HORIZ	Y/D = .50	VERTICAL	HORIZ	Y/D = .50
Y/D	C	Z/HW	Y/D	C	Z/HW	Y/D	C	Z/HW	Y/D	C	Z/HW
.949	0.000	.516	0.000	.949	0.000	.949	0.000	.688	0.000	0.000	0.000
.895	5.104	.473	.413	.895	0.039	.859	2.132	.895	17.359	.645	.458
.841	8.015	.430	1.219	.841	8.292	.516	2.171	.841	16.578	.602	.850
.788	12.442	.387	3.902	.788	11.875	.473	2.400	.788	13.418	.559	.871
.734	14.580	.344	6.794	.734	14.048	.430	3.085	.734	14.500	.516	.358
.681	21.893	.301	17.114	.681	17.479	.387	2.81	.681	19.894	.473	.894
.627	14.580	.258	12.069	.627	11.086	.344	2.00	.627	16.444	.430	6.842
.573	28.233	.215	18.876	.573	14.765	.301	4.756	.573	16.444	.387	1.386
.520	34.773	.172	31.725	.520	21.978	.258	6.929	.520	16.885	.344	3.980
.466	49.000	.129	34.714	.466	23.248	.215	6.191	.466	17.118	.301	1.118
.413	30.485	.086	24.057	.413	18.879	.172	11.357	.413	15.854	.258	8.452
.359	27.156	.043	23.824	.359	19.402	.129	18.409	.359	14.749	.215	4.138
.305	29.270	0.000	38.100	.305	23.830	.086	19.702	.305	23.400	.172	11.225
.252	23.127	-.043	36.310	.252	20.409	.043	19.311	.252	18.174	.129	9.749
.198	30.267	-.086	24.604	.198	25.400	0.000	24.600	.198	14.132	.086	17.441
.145	25.123	-.129	20.932	.145	20.127	-.043	18.737	.145	17.417	.043	13.282
.091	20.018	-.172	15.770	.091	14.872	-.086	16.504	.091	14.856	0.000	17.530
.038	17.267	-.215	21.850	.038	19.563	-.129	16.318	.038	16.997	-.043	16.278
0.000	0.000	-.258	11.200	0.000	0.000	-.172	12.254	0.000	0.000	-.086	13.550
0.000	0.000	-.301	5.233	0.000	0.000	-.215	13.284	0.000	0.000	-.129	17.038
0.000	0.000	-.344	3.718	0.000	0.000	-.258	1.856	0.000	0.000	-.172	11.114
0.000	0.000	-.387	2.203	0.000	0.000	-.301	4.838	0.000	0.000	-.215	13.774
0.000	0.000	-.430	1.148	0.000	0.000	-.344	10.742	0.000	0.000	-.258	10.151
0.000	0.000	-.473	.413	0.000	0.000	-.387	4.499	0.000	0.000	-.301	6.440
0.000	0.000	-.516	.184	0.000	0.000	-.430	2.624	0.000	0.000	-.344	7.374
0.000	0.000	0.000	0.000	0.000	0.000	-.473	1.476	0.000	0.000	-.387	9.346
0.000	0.000	0.000	0.000	0.000	0.000	-.516	.738	0.000	0.000	-.430	5.098
0.000	0.000	0.000	0.000	0.000	0.000	-.559	.123	0.000	0.000	-.473	4.114
0.000	0.000	0.000	0.000	0.000	0.000	-.602	.041	0.000	0.000	-.516	3.399
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.559	2.012
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.602	1.476
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.645	2.102
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.688	.447
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.541261	1.902031	.552502	1.958837	.517358	2.059241	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.041894	.114967	.048291	.159515	.057542	.227573	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
VARIANCE H	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B
.038574	.089789	.048631	.095864	.058107	.177521	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C
21.8129	13.7399	16.1439	7.9017	16.1822	6.7391	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

LARGE NOZZLE DIAMETER = 1.882CM											
JET STRENGTH = .41 FROUDE NO. = INF.											
STATION 1.00				STATION 2.00				STATION 3.00			
VERTICAL	HORIZ	Y/D = .50	VERTICAL	HORIZ	Y/D = .50	VERTICAL	HORIZ	Y/D = .50	VERTICAL	HORIZ	Y/D = .50
Y/D	C	Z/HW	Y/D	C	Z/HW	Y/D	C	Z/HW	Y/D	C	Z/HW
.771	0.000	.140	0.000	.478	0.000	.258	0.000	.882	0.000	.931	.619
.749	1.943	.129	4.229	.824	1.979	.237	.325	.829	4.303	.921	.472
.728	.511	.118	6.900	.771	2.270	.215	1.340	.775	5.514	.917	.301
.706	4.103	.108	3.561	.717	7.043	.194	2.599	.721	11.278	.912	5.259
.685	6.478	.097	3.339	.663	24.737	.172	3.655	.668	12.448	.886	3.556
.663	1.592	.086	26.266	.610	16.181	.151	7.715	.614	12.949	.843	9.033
.642	22.456	.075	38.063	.556	33.700	.129	13.969	.561	16.500	0.000	20.600
.621	25.479	.065	24.262	.503	25.202	.108	15.304	.507	15.330	-.043	13.815
.599	52.469	.054	30.272	.449	24.446	.086	30.415	.453	15.832	-.086	12.425
.578	50.094	.043	35.615	.395	15.831	.065	25.055	.400	10.610	-.129	8.093
.556	77.300	.032	49.415	.342	11.932	.043	35.897	.346	6.433	-.172	5.518
.535	46.639	.022	67.000	.288	9.720	.022	36.100	.293	7.185	-.215	3.801
.513	62.401	.011	62.771	.235	6.111	0.000	32.202	.239	3.175	-.258	1.063
.492	42.753	0.000	48.302	.181	4.456	-.022	27.126	.185	1.128	-.301	.204
.471	27.206	-.011	51.419	.128	.757	-.043	22.903	.132	.835	0.000	0.000
.449	43.400	-.022	48.970	.074	.058	-.065	16.286	.078	0.000	0.000	0.000
.428	48.798	-.032	34.056	0.000	0.000	-.086	11.370	.025	0.000	0.000	0.000
.406	23.320	-.043	15.136	0.000	0.000	-.108	7.959	0.000	0.000	0.000	0.000
.385	17.922	-.054	44.638	0.000	0.000	-.129	8.609	0.000	0.000	0.000	0.000
.363	13.603	-.065	14.475	0.000	0.000	-.151	7.244	0.000	0.000	0.000	0.000
.342	17.440	-.075	10.017	0.000	0.000	-.172	6.538	0.000	0.000	0.000	0.000
.320	16.194	-.086	9.794	0.000	0.000	-.194	2.558	0.000	0.000	0.000	0.000
.299	4.942	-.097	2.494	0.000	0.000	-.215	.609	0.000	0.000	0.000	0.000
.278	3.239	-.108	.223	0.000	0.000	-.237	.081	0.000	0.000	0.000	0.000
.256	.432	-.118	.223	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.235	.216	-.129	.668	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.140	1.113	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.456217	1.919800	.464714	1.911543	.431825	2.013202	.440708	2.049421	.440708	2.049421	.440708	2.049421
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.007742	.008412	.017744	.025607	.020477	.034264	.025211	.065571	.025211	.065571	.025211	.065571
VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H
.004321	.001344	.011438	.021151	.022298	.017904	.014439	.059186	.014439	.059186	.014439	.059186
AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C
24.4988	21.8008	11.5189	13.1619	7.2859	5.9295	5.8923	4.7415	5.8923	4.7415	5.8923	4.7415

TABLE 7 - continued

LARGE NOZZLE DIAMETER = 1.882CM											
JET STRENGTH = .41				FROUDE NO. = INF.				STATION 0.00			
STATION 5.00				STATION 7.00				STATION 0.00			
VERTICAL	C	HORIZ	Y/D = .55	VERTICAL	C	HORIZ	Y/D = .55	VERTICAL	C	HORIZ	Y/D = 0.00
Y/D	Z/HW	Y/D	Z/HW	Y/D	Z/HW	Y/D	Z/HW	Y/D	Z/HW	Y/D	Z/HW
.931	1.262	.473	0.000	.931	3.674	.473	0.000	.931	2.069	.516	0.000
.878	1.528	.430	.945	.878	3.720	.430	.945	.878	1.494	.473	.062
.824	2.148	.387	1.112	.824	2.432	.387	.944	.824	5.225	.430	.166
.771	8.084	.344	.672	.771	4.760	.344	.444	.771	6.322	.387	1.804
.717	7.663	.301	.357	.717	6.665	.301	.547	.717	6.632	.344	2.197
.663	7.619	.258	.420	.663	5.404	.258	.690	.663	6.227	.301	1.534
.610	4.391	.215	.126	.610	9.770	.215	1.254	.610	4.734	.258	3.980
.554	13.400	.172	1.364	.554	8.106	.172	3.485	.554	5.737	.215	3.172
.501	12.479	.129	4.261	.501	6.132	.129	4.123	.501	7.720	.172	4.602
.449	12.341	.086	4.844	.449	4.822	.086	5.072	.449	6.718	.129	4.146
.395	9.480	.043	10.012	.395	6.672	.043	6.142	.395	4.670	.086	6.758
.342	8.328	0.000	12.300	.342	4.734	0.000	10.300	.342	2.943	.043	8.230
.288	4.098	-.043	9.928	.288	3.429	-.043	8.174	.288	1.574	0.000	7.567
.235	2.636	-.086	4.131	.235	2.931	-.086	6.763	.235	4.756	-.043	6.261
.181	5.205	-.129	10.201	.181	2.078	-.129	5.021	.181	3.092	-.086	7.670
.128	2.104	-.172	4.424	.128	3.076	-.172	3.554	.128	1.450	-.129	6.240
.074	1.683	-.215	3.148	.074	1.185	-.215	3.295	.074	1.983	-.172	5.038
0.000	0.000	-.258	2.120	0.000	0.000	-.258	2.898	0.000	0.000	-.215	4.457
0.000	0.000	-.301	.735	0.000	0.000	-.301	2.743	0.000	0.000	-.258	2.446
0.000	0.000	-.344	.609	0.000	0.000	-.344	1.691	0.000	0.000	-.301	1.347
0.000	0.000	-.387	.546	0.000	0.000	-.387	.863	0.000	0.000	-.344	.974
0.000	0.000	-.430	.126	0.000	0.000	-.430	.380	0.000	0.000	-.387	.539
0.000	0.000	-.473	.021	0.000	0.000	-.473	.064	0.000	0.000	-.430	.249
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.473	.124
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.516	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.559	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.457415	1.944509	.426984	2.013382	.428758	1.920890	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.030237	.073122	.040620	.094037	.041209	.116678	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B
.026095	.043765	.027089	.048605	.034156	.103297	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C
6.4700	3.3657	4.6423	2.8460	4.3267	3.0601	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

LARGE NOZZLE DIAMETER = 1.882CM											
JET STRENGTH = 1.23				FROUDE NO. = INF.				STATION 5.00			
STATION 3.00				STATION 5.00				STATION 7.00			
VERTICAL	C	HORIZ	Y/D = .55	VERTICAL	C	HORIZ	Y/D = .55	VERTICAL	C	HORIZ	Y/D = .55
Y/D	Z/HW	Y/D	Z/HW	Y/D	Z/HW	Y/D	Z/HW	Y/D	Z/HW	Y/D	Z/HW
.839	0.000	.108	0.000	.946	0.000	.387	0.000	.946	2.442	.516	0.000
.786	4.675	.097	31.728	.893	1.259	.344	1.272	.893	5.300	.473	2.012
.732	25.927	.086	29.512	.839	3.777	.301	2.289	.839	15.174	.430	2.471
.678	24.327	.075	25.597	.786	3.462	.258	3.645	.786	20.370	.387	3.161
.625	121.559	.065	70.166	.732	8.026	.215	14.241	.732	23.384	.344	2.529
.571	336.200	.054	63.240	.678	26.753	.172	14.326	.678	21.721	.301	8.679
.518	322.599	.043	104.496	.625	51.460	.129	21.955	.625	23.800	.258	5.862
.464	221.441	.032	138.826	.571	64.660	.086	27.380	.571	22.137	.215	5.920
.411	139.835	.022	250.248	.518	88.600	.043	37.891	.518	18.863	.172	10.978
.357	41.228	.011	275.845	.464	44.257	0.000	47.300	.464	13.407	.129	11.667
.303	9.776	0.000	343.000	.411	31.474	-.043	29.329	.411	13.147	.086	12.587
.250	2.125	-.011	220.134	.357	25.337	-.086	28.312	.357	8.366	.043	15.748
.196	1.275	-.022	150.270	.303	10.072	-.129	18.564	.303	7.535	0.000	22.300
0.000	0.000	-.032	126.781	.250	4.406	-.172	17.038	.250	3.274	-.043	16.847
0.000	0.000	-.043	85.825	.196	2.675	-.215	10.003	.196	4.105	-.086	14.369
0.000	0.000	-.054	52.047	.143	1.254	-.258	4.493	.143	2.442	-.129	17.185
0.000	0.000	-.065	33.126	.089	.315	-.301	3.306	.089	3.118	-.172	7.759
0.000	0.000	-.075	8.131	0.000	0.000	-.344	1.356	0.000	0.000	-.215	5.977
0.000	0.000	-.086	15.659	0.000	0.000	-.387	.085	0.000	0.000	-.258	4.541
0.000	0.000	-.097	1.265	0.000	0.000	0.000	0.000	0.000	0.000	-.301	3.408
0.000	0.000	-.108	2.710	0.000	0.000	0.000	0.000	0.000	0.000	-.344	4.598
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.387	2.754
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.430	1.149
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.473	1.035
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.516	.747
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.445533	1.425772	.443183	1.420027	.426170	1.433503	.378889	1.439762	.378889	1.439762	.378889	1.439762
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.006007	.004518	.004518	.004518	.004518	.004518	.004518	.004518	.004518	.004518	.004518	.004518
VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B
.005547	.002414	.002414	.002414	.002414	.002414	.002414	.002414	.002414	.002414	.002414	.002414
AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C
96.6140	96.6151	21.4301	27.4089	24.0247	14.8833	12.2699	7.7935	12.2699	7.7935	12.2699	7.7935

TABLE 7 - continued

LARGE NOZZLE DIAMETER = 1.882CM											
JET STRENGTH = 1.2J				FROUDE NO. = INF.							
STATION 4.00				STATION 11.00				STATION 0.00			
VERTICAL	HORIZ	Y/D = .55		VERTICAL	HORIZ	Y/D = .55		VERTICAL	HORIZ	Y/D = 0.00	
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.893	4.451	.559	0.000	.893	1.165	.559	0.000	.893	0.000	0.000	0.000
.839	11.240	.516	1.652	.839	11.706	.516	.200	.839	0.000	0.000	0.000
.786	20.800	.473	1.796	.786	11.519	.473	.561	.786	0.000	0.000	0.000
.732	20.360	.430	1.285	.732	11.706	.430	.641	.732	0.000	0.000	0.000
.678	16.893	.387	1.346	.678	10.400	.387	.761	.678	0.000	0.000	0.000
.625	11.170	.344	.551	.625	10.025	.344	1.442	.625	0.000	0.000	0.000
.571	8.914	.301	.612	.571	7.012	.301	1.682	.571	0.000	0.000	0.000
.518	15.628	.258	3.978	.518	13.502	.258	4.166	.518	0.000	0.000	0.000
.464	12.711	.215	6.793	.464	11.474	.215	5.368	.464	0.000	0.000	0.000
.411	13.592	.172	13.096	.411	7.939	.172	3.084	.411	0.000	0.000	0.000
.357	13.422	.129	3.672	.357	5.911	.129	5.768	.357	0.000	0.000	0.000
.303	11.390	.086	7.955	.303	7.128	.086	9.133	.303	0.000	0.000	0.000
.250	13.151	.043	14.503	.250	5.911	.043	14.300	.250	0.000	0.000	0.000
.196	11.225	0.000	14.870	.196	5.447	0.000	9.974	.196	0.000	0.000	0.000
.143	10.840	-.043	12.451	.143	11.242	-.043	8.091	.143	0.000	0.000	0.000
.089	8.804	-.086	16.400	.089	13.792	-.086	11.136	.089	0.000	0.000	0.000
.035	8.144	-.129	12.606	.035	8.808	-.129	10.054	.035	0.000	0.000	0.000
0.000	0.000	-.172	14.319	0.000	0.000	-.172	11.696	0.000	0.000	0.000	0.000
0.000	0.000	-.215	11.015	0.000	0.000	-.215	9.774	0.000	0.000	0.000	0.000
0.000	0.000	-.258	7.037	0.000	0.000	-.258	6.529	0.000	0.000	0.000	0.000
0.000	0.000	-.301	6.976	0.000	0.000	-.301	10.535	0.000	0.000	0.000	0.000
0.000	0.000	-.344	9.424	0.000	0.000	-.344	5.528	0.000	0.000	0.000	0.000
0.000	0.000	-.387	4.406	0.000	0.000	-.387	3.044	0.000	0.000	0.000	0.000
0.000	0.000	-.430	6.242	0.000	0.000	-.430	2.684	0.000	0.000	0.000	0.000
0.000	0.000	-.473	3.610	0.000	0.000	-.473	2.403	0.000	0.000	0.000	0.000
0.000	0.000	-.516	.796	0.000	0.000	-.516	1.562	0.000	0.000	0.000	0.000
0.000	0.000	-.559	.673	0.000	0.000	-.559	1.803	0.000	0.000	0.000	0.000
0.000	0.000	-.602	.245	0.000	0.000	-.602	.401	0.000	0.000	0.000	0.000
0.000	0.000	-.645	0.000	0.000	0.000	-.645	.160	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.688	.401	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.731	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.426651	2.000430	.434656	2.024127	.426651	2.000430	.434656	2.024127	.426651	2.000430	.434656	2.024127
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.052479	.167267	.061163	.168710	.052479	.167267	.061163	.168710	.052479	.167267	.061163	.168710
VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B
.039400	.129772	.038064	.110339	.039400	.129772	.038064	.110339	.039400	.129772	.038064	.110339
AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C
12.5460	6.1278	9.1272	4.6090	12.5460	6.1278	9.1272	4.6090	12.5460	6.1278	9.1272	4.6090

LARGE NOZZLE DIAMETER = 1.882CM											
JET STRENGTH = 2.15				FROUDE NO. = INF.							
STATION 1.00				STATION 3.00				STATION 5.00			
VERTICAL	HORIZ	Y/D = .55		VERTICAL	HORIZ	Y/D = .55		VERTICAL	HORIZ	Y/D = .55	
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.839	0.000	.097	0.000	.893	2.032	.172	0.000	.893	3.282	.344	0.000
.818	0.000	.086	15.383	.839	5.977	.129	8.822	.839	11.606	.301	.825
.796	0.000	.075	13.573	.786	38.374	.086	24.202	.786	29.307	.258	.825
.775	1.178	.065	54.120	.732	54.035	.043	47.212	.732	15.591	.215	1.415
.753	16.194	.054	126.384	.678	88.942	0.000	22.652	.678	18.268	.172	2.711
.732	83.619	.043	160.770	.625	126.990	-.043	81.766	.625	41.449	.129	11.671
.711	96.575	.032	244.925	.571	137.000	-.086	104.200	.571	62.600	.086	18.745
.689	106.352	.022	305.252	.518	79.976	-.129	77.614	.518	33.059	.043	24.639
.668	181.666	.011	442.796	.464	64.914	-.172	50.550	.464	43.375	0.000	54.348
.646	334.772	0.000	414.141	.411	41.124	-.215	34.932	.411	39.154	-.043	59.299
.625	379.526	-.011	536.000	.357	14.465	-.258	9.776	.357	24.384	-.086	62.600
.603	492.000	-.022	452.750	.303	29.169	-.301	.954	.303	25.790	-.129	46.449
.582	415.447	-.032	294.694	.250	17.573	-.344	0.000	.250	21.336	-.172	41.262
.561	460.320	-.043	181.281	.196	8.129	0.000	0.000	.196	23.211	-.215	27.586
.539	455.785	-.054	193.346	.143	3.706	0.000	0.000	.143	13.950	-.258	24.521
.518	384.826	-.065	110.096	.089	3.228	0.000	0.000	.089	7.268	-.301	12.143
.496	274.118	-.075	83.654	0.000	0.000	0.000	0.000	.344	4.924	-.344	10.728
.475	174.305	-.086	55.500	0.000	0.000	0.000	0.000	.387	7.073	-.387	7.073
.453	128.373	-.097	11.160	0.000	0.000	0.000	0.000	.430	3.537	-.430	3.537
.432	94.224	-.108	4.524	0.000	0.000	0.000	0.000	.473	.236	-.473	.236
.411	48.582	-.118	.603	0.000	0.000	0.000	0.000	.516	0.000	-.516	0.000
.389	8.833	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.368	1.178	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.346	2.355	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.377731	1.929177	.356505	2.006018	.377731	1.929177	.356505	2.006018	.377731	1.929177	.356505	2.006018
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.004581	.004430	.017403	.029491	.004581	.004430	.017403	.029491	.004581	.004430	.017403	.029491
VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B
.004404	.003302	.010938	.021793	.004404	.003302	.010938	.021793	.004404	.003302	.010938	.021793
AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C
0.5512	6.4634	44.8523	35.5423	0.5512	6.4634	44.8523	35.5423	0.5512	6.4634	44.8523	35.5423

TABLE 7 - continued

LARGE NOZZLE DIAMETER = 1.882CM															
JET STRENGTH = 2.15								FROUDE NO. = INF.							
STATION 0.00				STATION 11.00				STATION 0.00				STATION 0.00			
VERTICAL	C	HORIZ	Y/D = .55	VERTICAL	C	HORIZ	Y/D = .55	VERTICAL	C	HORIZ	Y/D = 0.00	VERTICAL	C	HORIZ	Y/D = 0.00
Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW	
.946	7.132	.559	0.000	.946	9.896	.559	0.000	.946	0.000	0.000	0.000	.946	0.000	0.000	0.000
.893	5.151	.516	2.112	.893	12.896	.516	1.901	.893	0.000	0.000	0.000	.946	0.000	0.000	0.000
.849	20.772	.473	5.280	.849	7.462	.473	1.780	.849	0.000	0.000	0.000	.946	0.000	0.000	0.000
.788	15.898	.430	4.891	.788	10.187	.430	1.658	.788	0.000	0.000	0.000	.946	0.000	0.000	0.000
.732	20.150	.387	4.224	.732	7.364	.387	3.377	.732	0.000	0.000	0.000	.946	0.000	0.000	0.000
.678	14.037	.344	4.664	.678	14.577	.344	5.812	.678	0.000	0.000	0.000	.946	0.000	0.000	0.000
.625	27.188	.301	3.557	.625	13.885	.301	2.344	.625	0.000	0.000	0.000	.946	0.000	0.000	0.000
.571	28.300	.258	13.006	.571	22.400	.258	9.823	.571	0.000	0.000	0.000	.946	0.000	0.000	0.000
.514	26.432	.215	18.620	.514	13.808	.215	8.042	.514	0.000	0.000	0.000	.946	0.000	0.000	0.000
.464	17.546	.172	11.561	.464	16.447	.172	12.340	.464	0.000	0.000	0.000	.946	0.000	0.000	0.000
.411	18.225	.129	17.175	.411	18.841	.129	10.191	.411	0.000	0.000	0.000	.946	0.000	0.000	0.000
.357	13.414	.086	15.841	.357	13.440	.086	18.304	.357	0.000	0.000	0.000	.946	0.000	0.000	0.000
.303	13.131	.043	15.397	.303	.123	.043	18.602	.303	0.000	0.000	0.000	.946	0.000	0.000	0.000
.250	15.905	0.000	22.400	.250	12.090	0.000	19.400	.250	0.000	0.000	0.000	.946	0.000	0.000	0.000
.196	10.867	-.043	16.786	.196	15.956	-.043	16.883	.196	0.000	0.000	0.000	.946	0.000	0.000	0.000
.143	6.679	-.086	18.898	.143	21.602	-.086	16.760	.143	0.000	0.000	0.000	.946	0.000	0.000	0.000
0.000	0.000	-.129	11.450	0.000	12.826	-.129	16.822	0.000	0.000	0.000	0.000	.946	0.000	0.000	0.000
0.000	0.000	-.172	16.619	0.000	0.000	-.172	7.060	0.000	0.000	0.000	0.000	.946	0.000	0.000	0.000
0.000	0.000	-.215	12.562	0.000	0.000	-.215	9.209	0.000	0.000	0.000	0.000	.946	0.000	0.000	0.000
0.000	0.000	-.258	13.062	0.000	0.000	-.258	.921	0.000	0.000	0.000	0.000	.946	0.000	0.000	0.000
0.000	0.000	-.301	13.118	0.000	0.000	-.301	3.868	0.000	0.000	0.000	0.000	.946	0.000	0.000	0.000
0.000	0.000	-.344	4.558	0.000	0.000	-.344	6.630	0.000	0.000	0.000	0.000	.946	0.000	0.000	0.000
0.000	0.000	-.387	1.334	0.000	0.000	-.387	7.060	0.000	0.000	0.000	0.000	.946	0.000	0.000	0.000
0.000	0.000	-.430	.611	0.000	0.000	-.430	5.404	0.000	0.000	0.000	0.000	.946	0.000	0.000	0.000
0.000	0.000	-.473	.111	0.000	0.000	-.473	2.149	0.000	0.000	0.000	0.000	.946	0.000	0.000	0.000
0.000	0.000	-.516	.333	0.000	0.000	-.516	1.105	0.000	0.000	0.000	0.000	.946	0.000	0.000	0.000
0.000	0.000	-.559	.778	0.000	0.000	-.559	.123	0.000	0.000	0.000	0.000	.946	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.602	0.000	0.000	0.000	0.000	0.000	.946	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.418537		1.907285		.475610		1.953197		0.000000		0.000000		0.000000		0.000000	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.037129		.170408		.055040		.174392		0.000000		0.000000		0.000000		0.000000	
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B	
.032014		.136098		.036680		.121853		0.000000		0.000000		0.000000		0.000000	
AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C	
16.2973		9.2206		13.3137		7.2750		0.0000		0.0000		0.0000		0.0000	

LARGE NOZZLE DIAMETER = 1.882CM															
JET STRENGTH = 3.80								FROUDE NO. = INF.							
STATION 1.00				STATION 3.00				STATION 5.00				STATION 7.00			
VERTICAL	C	HORIZ	Y/D = .55	VERTICAL	C	HORIZ	Y/D = .55	VERTICAL	C	HORIZ	Y/D = .55	VERTICAL	C	HORIZ	Y/D = .55
Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW	
.775	0.000	.097	0.000	.946	0.000	.258	0.000	.946	0.000	.344	0.000	.946	10.894	.516	.521
.753	0.000	.086	2.338	.893	15.195	.215	2.681	.893	4.918	.301	3.986	.893	7.003	.473	1.669
.732	.596	.075	9.351	.839	8.864	.172	36.646	.839	24.588	.258	4.293	.839	28.596	.430	7.091
.711	19.684	.065	20.455	.786	14.562	.129	11.503	.786	12.728	.215	2.760	.786	37.155	.387	6.883
.689	43.543	.054	64.547	.732	63.314	.086	84.612	.732	29.216	.172	12.265	.732	62.250	.344	5.944
.668	76.946	.043	107.534	.678	106.368	.043	146.880	.678	76.656	.129	30.664	.678	32.681	.301	22.525
.646	104.384	.032	278.186	.625	130.428	0.000	216.000	.625	43.680	.086	42.929	.625	74.700	.258	33.579
.625	285.116	.022	482.735	.571	157.653	-.043	207.062	.571	70.292	.043	91.991	.571	62.834	.215	55.479
.603	321.501	.011	585.544	.518	222.234	-.086	145.986	.518	126.700	0.000	93.217	.518	71.587	.172	32.537
.582	455.112	0.000	803.000	.464	223.500	-.129	19.846	.464	101.823	-.043	134.000	.464	39.101	.129	51.620
.561	535.040	-.011	725.271	.411	168.416	-.172	32.177	.411	92.566	-.086	89.844	.411	43.186	.086	77.900
.539	635.248	-.022	603.711	.357	139.292	-.215	4.171	.357	64.796	-.129	85.245	.357	65.362	.043	63.613
.518	745.000	-.032	387.474	.303	116.499	-.258	.596	.303	40.787	-.172	50.902	.303	41.824	0.000	43.903
.496	546.970	-.043	316.758	.250	79.143	0.000	0.000	.250	21.695	-.215	42.009	.250	67.113	-.043	30.555
.475	531.461	-.054	114.547	.196	16.462	0.000	0.000	.196	22.563	-.258	32.810	.196	34.247	-.086	27.739
.453	476.971	-.065	105.197	.143	5.698	0.000	0.000	.143	5.496	-.301	9.199	.143	16.924	-.129	14.808
.432	406.797	-.075	26.299	.086	.633	0.000	0.000	.086	2.314	-.344	3.373	.086	16.535	-.172	10.324
.411	282.134	-.086	5.844	0.000	0.000	0.000	0.000	.043	1.157	-.387	2.453	0.000	0.000	-.215	5.423
.389	167.610	-.097	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.258	13.035
.368	125.857	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.301	1.773
.346	64.420	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.344	0.000
.325	34.771	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.387	0.000
.303	14.701	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.282	8.947	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.260	.596	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.239	.596	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.455558		1.944386		.475995		1.953800		.463860		2.040768		.465947		1.763822	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.004497		.002770		.018036		.026295		.021440		.049360		.035079		.081014	
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B	
.003482		.002119		.017164		.025028		.013124		.032666		.034767		.046754	
AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C	
6.6154		4.4127		80.3684		79.0892		41.2209		40.6634		41.8814		23.0420	

TABLE 7 - continued

LARGE NOZZLE DIAMETER = 1.842CM															
STATION 9.00				JET STRENGTH = 3.80				FROUDE NO. = INF.				STATION 13.00			
VERTICAL	C	HORIZ	Y/D = .55	VERTICAL	C	HORIZ	Y/D = .55	VERTICAL	C	HORIZ	Y/D = .55	VERTICAL	C	HORIZ	Y/D = 0.00
Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW	
.946	16.157	.473	0.000	.946	4.585	.473	0.000	.946	14.342	.731	0.000	.000	0.000	0.000	0.000
.898	24.296	.430	5.364	.893	18.257	.430	1.516	.893	16.708	.688	.746	.000	0.000	0.000	0.000
.839	49.564	.387	4.726	.839	35.180	.387	8.944	.839	11.163	.645	1.244	.000	0.000	0.000	0.000
.786	37.538	.344	8.557	.786	34.930	.344	3.563	.786	3.696	.602	1.866	.000	0.000	0.000	0.000
.732	41.547	.301	16.476	.732	25.010	.301	5.458	.732	13.455	.559	.622	.000	0.000	0.000	0.000
.679	65.600	.258	15.837	.678	30.762	.258	6.898	.678	8.576	.516	4.354	.000	0.000	0.000	0.000
.625	53.573	.215	18.902	.625	42.600	.215	14.402	.625	9.832	.473	8.210	.000	0.000	0.000	0.000
.571	43.612	.172	40.487	.571	29.695	.172	14.175	.571	11.533	.430	5.349	.000	0.000	0.000	0.000
.518	51.751	.129	44.446	.518	27.427	.129	18.420	.518	7.836	.387	5.722	.000	0.000	0.000	0.000
.464	29.277	.086	51.598	.464	28.178	.086	24.256	.464	19.369	.344	21.768	.000	0.000	0.000	0.000
.411	48.107	.043	52.620	.411	23.509	.043	32.822	.411	14.638	.301	22.515	.000	0.000	0.000	0.000
.357	38.074	0.000	64.625	.357	24.926	0.000	42.600	.357	10.350	.258	19.778	.000	0.000	0.000	0.000
.303	26.726	-.043	83.400	.303	20.591	-.043	40.932	.303	16.116	.215	14.802	.000	0.000	0.000	0.000
.250	28.305	-.086	55.430	.250	13.088	-.086	37.142	.250	11.755	.172	15.424	.000	0.000	0.000	0.000
.196	16.400	-.129	34.739	.196	12.422	-.129	29.562	.196	20.700	.129	22.017	.000	0.000	0.000	0.000
.143	14.821	-.172	17.242	.143	9.337	-.172	21.300	.143	12.444	.086	21.520	.000	0.000	0.000	0.000
.089	4.859	-.215	44.829	.089	6.836	-.215	18.344	.089	14.120	.043	35.700	.000	0.000	0.000	0.000
.000	0.000	-.258	15.709	.000	0.000	-.258	20.239	.000	0.000	0.000	23.510	.000	0.000	0.000	0.000
.000	0.000	-.301	12.006	.000	0.000	-.301	9.778	.000	0.000	-.043	27.988	.000	0.000	0.000	0.000
.000	0.000	-.344	4.174	.000	0.000	-.344	15.842	.000	0.000	-.086	27.117	.000	0.000	0.000	0.000
.000	0.000	-.387	4.087	.000	0.000	-.387	9.399	.000	0.000	-.129	24.007	.000	0.000	0.000	0.000
.000	0.000	-.430	1.533	.000	0.000	-.430	3.184	.000	0.000	-.172	15.176	.000	0.000	0.000	0.000
.000	0.000	-.473	.128	.000	0.000	-.473	1.213	.000	0.000	-.215	12.688	.000	0.000	0.000	0.000
.000	0.000	-.516	.383	.000	0.000	-.516	.227	.000	0.000	-.258	16.420	.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.000	0.000	0.000	0.000	.000	0.000	-.301	8.210	.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.000	0.000	0.000	0.000	.000	0.000	-.344	5.224	.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.000	0.000	0.000	0.000	.000	0.000	-.387	11.941	.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.000	0.000	0.000	0.000	.000	0.000	-.430	3.732	.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.000	0.000	0.000	0.000	.000	0.000	-.473	4.354	.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.000	0.000	0.000	0.000	.000	0.000	-.516	4.727	.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.000	0.000	0.000	0.000	.000	0.000	-.559	1.741	.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.000	0.000	0.000	0.000	.000	0.000	-.602	.746	.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.000	0.000	0.000	0.000	.000	0.000	-.645	2.488	.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.000	0.000	0.000	0.000	.000	0.000	-.688	.622	.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.000	0.000	0.000	0.000	.000	0.000	-.731	1.120	.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.401781		1.933730		.402878		2.016597		.472996		1.891262		0.000000		0.000000	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.039135		.107425		.040119		.125444		.063598		.244558		0.000000		0.000000	
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B	
.031056		.057415		.031831		.087991		.038000		.133862		0.000000		0.000000	
AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C	
34.7151		25.0541		22.7491		15.8423		12.7462		11.2413		0.0000		0.0000	

TABLE 8 - DIFFUSION DATA - RIVERBED ROUGHNESS - HEAT

TEMPERATURE DISTRIBUTIONS
INJECTION TEMPERATURE = 23.9 DEGREES CENTIGRADE

VARIANCE A USES BASIC DEFINITION
VARIANCE B USES REFLECTION PRINCIPLE

TABLE 8 - continued

SMALL NOZZLE DIAMETER = .468CM

JET STRENGTH = 1.00 FROUDE NO. = 21.00

STATION 2.50				STATION 1.00				STATION 12.50				STATION 2.00			
VERTICAL	DT	HORIZ	Y/D	VERTICAL	DT	HORIZ	Y/D	VERTICAL	DT	HORIZ	Y/D	VERTICAL	DT	HORIZ	Y/D
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.640	0.000	.086	.000	.714	0.000	.129	0.000	.884	.008	.215	0.000	.884	.008	.301	0.000
.604	.010	.075	.001	.673	.010	.118	.002	.841	.004	.194	.003	.831	.011	.280	.002
.587	.021	.065	.004	.642	.033	.103	.004	.778	.017	.172	.005	.778	.015	.258	.004
.566	.034	.054	.007	.611	.070	.087	.007	.725	.039	.151	.014	.725	.019	.237	.005
.545	.045	.043	.009	.580	.120	.086	.017	.672	.090	.129	.014	.672	.048	.215	.007
.524	.105	.032	.075	.548	.074	.075	.075	.619	.078	.108	.016	.619	.038	.194	.009
.503	.417	.022	.144	.517	.127	.065	.034	.586	.080	.086	.019	.586	.055	.172	.013
.481	.682	.011	.386	.486	.157	.054	.051	.513	.085	.065	.021	.513	.048	.151	.016
.460	.581	0.000	.617	.455	.228	.041	.048	.460	.070	.043	.028	.460	.047	.129	.021
.439	.286	-.011	.682	.424	.199	.032	.063	.407	.058	.022	.042	.407	.049	.108	.024
.418	.182	-.022	.448	.403	.170	.022	.113	.354	.041	0.000	.083	.354	.040	.086	.041
.397	.091	-.032	.262	.381	.200	.011	.193	.302	.032	-.022	.072	.302	.027	.065	.034
.376	.061	-.043	.125	.360	.144	0.000	.216	.249	.022	-.043	.054	.249	.021	.043	.038
.354	.047	-.054	.054	.348	.090	-.011	.169	.196	.014	-.055	.052	.196	.015	.022	.048
.333	.016	-.065	.016	.314	.060	-.022	.121	.143	.008	-.066	.042	.143	.009	0.000	.051
.312	.005	-.075	.005	.287	.025	-.032	.074	.090	.003	-.108	.029	.090	.006	-.022	.040
.291	.000	-.086	0.000	.276	.017	-.043	.093	0.000	0.000	-.129	.022	0.000	0.000	-.043	.041
0.000	0.000	0.000	0.000	.254	.009	-.054	.055	0.000	0.000	-.151	.012	0.000	0.000	-.065	.033
0.000	0.000	0.000	0.000	.231	.005	-.065	.024	0.000	0.000	-.172	.011	0.000	0.000	-.086	.031
0.000	0.000	0.000	0.000	.208	.000	-.075	.023	0.000	0.000	-.194	.006	0.000	0.000	-.108	.018
0.000	0.000	0.000	0.000	.186	.000	-.086	.010	0.000	0.000	-.215	.002	0.000	0.000	-.129	.016
0.000	0.000	0.000	0.000	.163	.000	-.097	.001	0.000	0.000	-.237	.000	0.000	0.000	-.151	.011
0.000	0.000	0.000	0.000	.141	.000	-.108	.001	0.000	0.000	0.000	0.000	0.000	0.000	-.172	.009
0.000	0.000	0.000	0.000	.118	.000	-.118	.001	0.000	0.000	0.000	0.000	0.000	0.000	-.194	.004
0.000	0.000	0.000	0.000	.096	.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.215	.003
0.000	0.000	0.000	0.000	.074	.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.237	.002
0.000	0.000	0.000	0.000	.052	.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.258	.001
0.000	0.000	0.000	0.000	.030	.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.280	.001
0.000	0.000	0.000	0.000	.008	.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.497394		1.952030		.444178		1.937743		.474160		1.973450		.474208		1.912349	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.001750		.001642		.004322		.004906		.022335		.023058		.027277		.036745	
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B	
.001042		.001242		.003703		.002694		.016194		.012233		.026547		.030254	
AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T	
.1623		.1701		.0828		.0562		.0342		.0251		.0285		.0191	

SMALL NOZZLE DIAMETER = .468CM

JET STRENGTH = 1.00 FROUDE NO. = 21.00

STATION 2.50				STATION 0.00				STATION 0.00				STATION 0.00			
VERTICAL	DT	HORIZ	Y/D	VERTICAL	DT	HORIZ	Y/D	VERTICAL	DT	HORIZ	Y/D	VERTICAL	DT	HORIZ	Y/D
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.937	.006	.301	.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.884	.006	.280	.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.831	.008	.258	.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.778	.015	.237	.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.725	.023	.215	.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.672	.031	.194	.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.619	.035	.172	.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.566	.037	.151	.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.513	.033	.129	.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.460	.032	.108	.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.407	.030	.086	.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.354	.023	.065	.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.302	.019	.043	.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.249	.015	.022	.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.196	.011	0.000	.034	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.141	.008	-.022	.036	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.090	.006	-.043	.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.065	.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.086	.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.108	.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.129	.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.151	.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.172	.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.194	.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.215	.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.237	.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.258	.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.280	.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.301	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.457178		1.920093		0.000000		0.000000		0.000000		0.000000		0.000000		0.550000	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.001750		.001642		0.000000		0.000000		0.000000		0.000000		0.000000		0.000000	
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B	
.001042		.001242		0.000000		0.000000		0.000000		0.000000		0.000000		0.000000	
AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T	
.16199		.17119		0.00000		0.00000		0.00000		0.00000		0.00000		0.00000	

TABLE 8 - continued

SMALL NOZZLE DIAMETER = .468CM JET STRENGTH = 2.69 FROUDE NO. = 57.50															
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	DT	HORIZ	Y/D = .48	VERTICAL	DT	HORIZ	Y/D = .51	VERTICAL	DT	HORIZ	Y/D = .51	VERTICAL	DT	HORIZ	Y/D = .57
Y/D	DT	Z/HW		Y/D	DT	Z/HW		Y/D	DT	Z/HW		Y/D	DT	Z/HW	
.735	0.000	.129	0.000	.437	0.000	.215	0.000	.437	.009	.344	0.000	.437	.007	.430	0.000
.714	.018	.118	.005	.884	.004	.194	.005	.884	.018	.301	.004	.884	.016	.387	.002
.693	.013	.108	.011	.831	.016	.172	.006	.831	.026	.258	.007	.831	.010	.344	.002
.672	.040	.097	.076	.778	.005	.151	.023	.778	.047	.215	.020	.778	.007	.301	.012
.651	.043	.086	.087	.725	.013	.129	.043	.725	.069	.172	.021	.725	.023	.258	.022
.630	.061	.075	.120	.672	.021	.108	.040	.672	.056	.129	.061	.672	.035	.215	.026
.608	.110	.065	.152	.619	.064	.086	.057	.619	.080	.086	.072	.619	.054	.172	.036
.587	.231	.054	.204	.566	.071	.065	.081	.566	.088	.043	.084	.566	.074	.129	.047
.566	.298	.043	.259	.513	.086	.043	.128	.513	.119	0.000	.111	.513	.071	.086	.055
.545	.420	.032	.273	.460	.153	.022	.137	.460	.083	-.043	.131	.460	.064	.043	.065
.524	.412	.022	.242	.407	.091	0.000	.145	.407	.073	-.086	.104	.407	.048	0.000	.080
.503	.337	.011	.180	.354	.071	-.022	.148	.354	.063	-.129	.091	.354	.052	-.043	.077
.481	.418	0.000	.534	.302	.040	-.043	.128	.302	.051	-.172	.063	.302	.033	-.086	.074
.460	.443	-.011	.333	.244	.036	-.065	.108	.244	.037	-.215	.038	.244	.016	-.129	.065
.439	.374	-.022	.229	.196	.031	-.086	.079	.196	.031	-.258	.012	.196	.013	-.172	.054
.418	.240	-.032	.208	.143	.022	-.108	.050	.143	.021	-.301	.007	.143	.009	-.215	.042
.397	.091	-.043	.206	.040	.010	-.129	.040	.040	.009	-.344	.004	.040	.007	-.258	.031
.376	.040	-.054	.142	0.000	0.000	-.151	.028	0.000	0.000	-.387	.002	0.000	0.000	-.301	.024
.354	.018	-.065	.106	0.000	0.000	-.172	.022	0.000	0.000	-.430	.001	0.000	0.000	-.344	.016
.333	.005	-.075	.050	0.000	0.000	-.194	.012	0.000	0.000	0.000	0.000	0.000	0.000	-.387	.008
.312	.002	-.086	.055	0.000	0.000	-.215	.002	0.000	0.000	0.000	0.000	0.000	0.000	-.430	.003
.291	0.000	-.097	.036	0.000	0.000	-.237	.000	0.000	0.000	0.000	0.000	0.000	0.000	-.473	.001
0.000	0.000	-.108	.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.118	.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.129	.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.464919	1.925920		.516412	1.952447		.455956	1.994989		.467210	2.006700					
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A					
.004072	.007222		.020921	.021975		.031283	.053347		.026666	.097170					
VARIANCE H	VARIANCE H		VARIANCE H	VARIANCE H		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B					
.004338	.003480		.009154	.020746		.021379	.044394		.020581	.094713					
AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T					
.1662	.1516		.0435	.0583		.0519	.0437		.0317	.0377					

SMALL NOZZLE DIAMETER = .468CM JET STRENGTH = 2.69 FROUDE NO. = 57.50															
STATION 5.00				STATION 6.00				STATION 7.00				STATION 8.00			
VERTICAL	DT	HORIZ	Y/D = .57	VERTICAL	DT	HORIZ	Y/D = 0.00	VERTICAL	DT	HORIZ	Y/D = 0.00	VERTICAL	DT	HORIZ	Y/D = 0.00
Y/D	DT	Z/HW		Y/D	DT	Z/HW		Y/D	DT	Z/HW		Y/D	DT	Z/HW	
.937	.019	.516	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.884	.013	.473	.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.831	.023	.430	.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.778	.034	.387	.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.725	.040	.344	.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.672	.044	.301	.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.619	.048	.258	.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.566	.054	.215	.033	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.513	.044	.172	.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.460	.043	.129	.041	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.407	.038	.086	.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.354	.031	.043	.051	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.302	.024	0.000	.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.249	.023	-.043	.057	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.196	.018	-.086	.042	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.143	.016	-.129	.039	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.172	.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.215	.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.258	.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.301	.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.344	.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.387	.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.430	.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.473	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.516	.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.427906	1.944440		0.000000	0.000000		0.000000	0.000000		0.000000	0.000000		0.000000	0.000000	0.000000	0.000000
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.003444	.010439		0.000000	0.000000		0.000000	0.000000		0.000000	0.000000		0.000000	0.000000	0.000000	0.000000
VARIANCE H	VARIANCE H		VARIANCE H	VARIANCE H		VARIANCE H	VARIANCE H		VARIANCE H	VARIANCE H		VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H
.004044	.007797		0.000000	0.000000		0.000000	0.000000		0.000000	0.000000		0.000000	0.000000	0.000000	0.000000
AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T
.0323	.0215		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000

TABLE 8 - continued

SMALL NOZZLE DIAMETER = .468CM JET STRENGTH = 4.86 FROUDE NO. = 107.00															
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	DT	HORIZ	Y/D = .46	VERTICAL	DT	HORIZ	Y/D = .46	VERTICAL	DT	HORIZ	Y/D = .51	VERTICAL	DT	HORIZ	Y/D = .57
Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW	
.757	0.000	.129	0.000	.831	0.000	.172	0.000	.947	0.004	.301	0.000	.937	0.010	.387	0.000
.735	.019	.118	.011	.778	.012	.151	.013	.884	.027	.280	.003	.884	.022	.344	.007
.714	.046	.108	.042	.725	.031	.129	.043	.841	.078	.258	.005	.831	.026	.301	.011
.693	.074	.097	.033	.672	.091	.108	.045	.778	.051	.237	.010	.778	.039	.258	.020
.672	.146	.086	.076	.619	.115	.086	.052	.725	.071	.215	.013	.725	.047	.215	.033
.651	.328	.075	.229	.566	.155	.065	.054	.672	.088	.184	.015	.672	.031	.172	.034
.630	.201	.065	.249	.513	.231	.043	.114	.619	.105	.172	.029	.619	.048	.129	.028
.608	.213	.054	.336	.460	.261	.022	.160	.566	.117	.151	.037	.566	.053	.086	.052
.587	.591	.043	.430	.407	.205	0.000	.238	.513	.093	.129	.051	.513	.074	.043	.064
.566	.727	.032	.607	.354	.156	-.022	.227	.460	.093	.108	.056	.460	.057	0.000	.071
.545	.789	.022	.650	.302	.125	-.043	.179	.407	.090	.086	.061	.407	.049	-.043	.047
.524	.774	.011	.624	.249	.085	-.065	.130	.354	.065	.065	.073	.354	.034	-.086	.066
.503	.625	0.000	.755	.196	.057	-.086	.081	.302	.044	.043	.112	.302	.024	-.129	.050
.481	.464	-.011	.679	.143	.038	-.108	.042	.249	.033	.022	.091	.249	.028	-.172	.038
.460	.606	-.022	.542	.090	.025	-.129	.028	.196	.024	0.000	.125	.196	.020	-.215	.029
.439	.461	-.032	.653	.037	.001	-.151	.023	.143	.022	-.022	.104	.143	.016	-.258	.026
.418	.384	-.043	.413	0.000	0.000	-.172	.010	.090	.021	-.043	.100	.090	.016	-.301	.017
.397	.213	-.054	.327	0.000	0.000	-.194	0.000	0.000	0.000	-.065	.092	0.000	0.000	-.344	.007
.376	.152	-.065	.264	0.000	0.000	0.000	0.000	0.000	0.000	-.086	.083	0.000	0.000	-.387	.000
.354	.056	-.075	.202	0.000	0.000	0.000	0.000	0.000	0.000	-.108	.069	0.000	0.000	0.000	0.000
.333	.006	-.086	.130	0.000	0.000	0.000	0.000	0.000	0.000	-.129	.064	0.000	0.000	0.000	0.000
0.000	0.000	-.097	.079	0.000	0.000	0.000	0.000	0.000	0.000	-.151	.053	0.000	0.000	0.000	0.000
0.000	0.000	-.108	.036	0.000	0.000	0.000	0.000	0.000	0.000	-.172	.039	0.000	0.000	0.000	0.000
0.000	0.000	-.118	.016	0.000	0.000	0.000	0.000	0.000	0.000	-.194	.024	0.000	0.000	0.000	0.000
0.000	0.000	-.129	.002	0.000	0.000	0.000	0.000	0.000	0.000	-.215	.016	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.237	.009	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.258	.009	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.280	.005	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.301	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.449955		1.934634		.524350		1.946661		.450276		1.957341		.446139		1.959672	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.005266		.006917		.018684		.015930		.031286		.041744		.037982		.091389	
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B	
.004816		.005854		.014728		.010817		.025760		.032229		.024631		.079087	
AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T	
.3269		.3035		.0993		.0827		.0561		.0466		.0350		.0316	

SMALL NOZZLE DIAMETER = .468CM JET STRENGTH = 4.86 FROUDE NO. = 107.00															
STATION 5.00				STATION 6.00				STATION 7.00				STATION 8.00			
VERTICAL	DT	HORIZ	Y/D = .57	VERTICAL	DT	HORIZ	Y/D = 0.00	VERTICAL	DT	HORIZ	Y/D = 0.00	VERTICAL	DT	HORIZ	Y/D = 0.00
Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW	
.937	.011	.430	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.884	.018	.387	.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.831	.019	.344	.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.778	.021	.301	.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.725	.038	.258	.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.672	.043	.215	.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.619	.039	.172	.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.566	.039	.129	.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.513	.039	.086	.041	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.460	.057	.043	.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.407	.039	0.000	.059	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.354	.032	-.043	.056	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.302	.024	-.086	.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.249	.022	-.129	.041	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.196	.017	-.172	.039	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.143	.013	-.215	.024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.090	.012	-.258	.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.301	.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.344	.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.387	.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.430	.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.473	.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.450308		1.945401		0.000000		0.000000		0.000000		0.000000		0.000000		0.000000	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.004301		.004152		0.000000		0.000000		0.000000		0.000000		0.000000		0.000000	
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B	
.0027451		.004531		0.000000		0.000000		0.000000		0.000000		0.000000		0.000000	
AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T	
.0246		.0240		0.0000		0.0000		0.0000		0.0000		0.0000		0.0000	

TABLE 8 - continued

SMALL NOZZLE DIAMETER = .46CM JET STRENGTH = 8.68 FROUDE NO. = 193.00															
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.672	0.000	.124	0.000	.884	0.000	.172	0.000	.437	0.005	.258	0.000	.437	0.044	.344	0.000
.651	.047	.118	.018	.831	.007	.151	.054	.454	.021	.237	.004	.884	.027	.301	.020
.630	.114	.108	.023	.778	.040	.124	.081	.431	.047	.215	.004	.831	.059	.258	.027
.608	.510	.047	.039	.725	.074	.108	.255	.478	.085	.194	.014	.778	.064	.215	.012
.587	.476	.086	.077	.672	.146	.086	.511	.425	.058	.172	.046	.725	.101	.172	.031
.566	.795	.075	.164	.619	.286	.065	.267	.672	.111	.151	.060	.672	.085	.124	.052
.545	.892	.065	.483	.566	.380	.043	.337	.619	.093	.124	.065	.619	.106	.086	.152
.524	.976	.054	.540	.513	.430	.022	.450	.566	.204	.108	.107	.566	.154	.043	.041
.503	.832	.043	.570	.460	.540	0.000	.454	.513	.145	.086	.181	.513	.133	0.000	.137
.481	.580	.032	.766	.407	.414	-.022	.479	.460	.175	.065	.124	.460	.102	-.043	.103
.460	.500	.022	.444	.354	.305	-.043	.333	.407	.128	.043	.150	.407	.073	-.086	.098
.439	.238	.011	.959	.302	.193	-.065	.272	.354	.114	.022	.175	.354	.071	-.124	.067
.418	.067	0.000	.975	.249	.125	-.086	.160	.302	.100	0.000	.193	.302	.059	-.172	.122
.397	.040	-.011	.877	.196	.067	-.108	.146	.249	.064	-.022	.157	.249	.049	-.215	.076
.376	.023	-.022	1.023	.143	.027	-.124	.061	.196	.049	-.043	.124	.196	.040	-.258	.036
.354	.017	-.032	.706	.040	.010	-.151	.034	.143	.029	-.065	.136	.143	.030	-.301	.020
.333	.007	-.043	.444	0.000	0.000	-.172	.004	.040	.011	-.086	.110	.040	.018	-.344	.006
0.000	0.000	-.054	.344	0.000	0.000	0.000	0.000	0.000	0.000	-.108	.082	.037	.023	-.387	.001
0.000	0.000	-.065	.519	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.061	0.000	0.000	0.000	0.000
0.000	0.000	-.075	.399	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.042	0.000	0.000	0.000	0.000
0.000	0.000	-.086	.244	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.029	0.000	0.000	0.000	0.000
0.000	0.000	-.097	.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.022	0.000	0.000	0.000	0.000
0.000	0.000	-.108	.036	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.011	0.000	0.000	0.000	0.000
0.000	0.000	-.118	.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.003	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.258	.001	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.441166		1.946230		.499803		1.914739		.468050		1.923318		.438600		1.996002	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.002517		.007448		.015510		.016479		.028520		.030332		.040145		.073008	
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B	
.002921		.004546		.012605		.016090		.019564		.026937		.023117		.052871	
AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T	
.3891		.4150		.1903		.2295		.0846		.0762		.0693		.0584	

SMALL NOZZLE DIAMETER = .46CM JET STRENGTH = 8.68 FROUDE NO. = 193.00															
STATION 5.00				STATION 6.00				STATION 7.00				STATION 8.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.937	.025	.430	0.000	.937	.011	.516	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.884	.038	.387	.002	.884	.015	.473	.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.831	.068	.344	.009	.831	.029	.430	.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.778	.077	.301	.012	.778	.034	.387	.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.725	.114	.258	.007	.725	.051	.344	.023	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.672	.079	.215	.032	.672	.054	.301	.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.619	.073	.172	.051	.619	.102	.258	.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.566	.119	.129	.064	.566	.108	.215	.033	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.513	.095	.086	.071	.513	.107	.172	.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.460	.078	.043	.066	.460	.085	.124	.044	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.407	.074	0.000	.121	.407	.084	.086	.068	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.354	.073	-.043	.098	.354	.043	.043	.088	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.302	.061	-.066	.095	.302	.024	0.000	.105	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.249	.045	-.129	.066	.249	.026	-.043	.111	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.196	.036	-.172	.052	.196	.025	-.086	.098	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.143	.076	-.215	.036	.143	.017	-.124	.084	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.090	.025	-.258	.026	.090	.013	-.172	.065	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.037	.000	-.301	.019	.037	0.000	-.215	.042	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.344	.004	0.000	0.000	-.258	.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.387	.005	0.000	0.000	-.301	.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.430	.001	0.000	0.000	-.344	.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.387	.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.430	.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.473	.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.516	.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.431545		1.964095		.444451		1.950710		.460000		.460000		.460000		.460000	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.040754		.000751		.024031		.116143		.060000		.060000		.060000		.060000	
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B	
.074226		.051544		.022186		.083746		.060000		.060000		.060000		.060000	
AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T	
.0670		.0401		.0451		.0387		.0600		.0600		.0600		.0600	

TABLE 8 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 1.88				FROUDE NO. = 29.20											
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	HORIZ	Y/D	Z/HW	VERTICAL	HORIZ	Y/D	Z/HW	VERTICAL	HORIZ	Y/D	Z/HW	VERTICAL	HORIZ	Y/D	Z/HW
Y/D	DT	DT	DT	Y/D	DT	DT	DT	Y/D	DT	DT	DT	Y/D	DT	DT	DT
.751	0.000	.179	0.000	.847	0.000	.215	0.000	.849	0.007	.344	0.001	.452	0.009	.430	0.000
.730	.022	.118	.025	.794	.014	.144	.011	.847	.021	.301	.013	.849	.006	.387	.017
.709	.029	.108	.133	.741	.023	.172	.022	.794	.027	.258	.016	.847	.031	.344	.022
.688	.042	.097	.065	.688	.056	.151	.064	.741	.054	.215	.032	.794	.040	.301	.019
.667	.045	.086	.144	.635	.180	.129	.272	.688	.071	.172	.054	.741	.113	.258	.036
.646	.212	.075	.277	.582	.143	.104	.152	.635	.102	.129	.043	.688	.129	.215	.021
.624	.404	.055	.545	.529	.455	.086	.114	.582	.152	.086	.156	.635	.122	.172	.082
.603	.456	.054	.640	.476	.237	.065	.201	.529	.276	.043	.208	.582	.148	.129	.075
.582	.831	.043	.934	.423	.207	.043	.366	.476	.264	0.000	.244	.529	.141	.086	.066
.561	.899	.032	1.273	.370	.144	.022	.325	.423	.273	0.000	.144	.476	.122	.043	.126
.540	1.029	.022	.636	.317	.176	0.000	.364	.370	.223	0.000	.176	.423	.101	0.000	.114
.519	1.670	.011	1.310	.265	.087	0.000	.341	.317	.177	0.000	.047	.370	.063	0.000	.122
.497	1.088	0.000	.797	.212	.040	0.000	.226	.265	.145	0.000	.040	.317	.042	0.000	.148
.476	.531	0.000	1.115	.159	.006	0.000	.201	.212	.107	0.000	.024	.265	.029	0.000	.094
.455	.666	0.000	.840	.000	0.000	0.000	.144	.159	.075	0.000	.015	.212	.017	0.000	.070
.434	.407	0.000	.503	.000	0.000	0.000	.122	.106	.040	0.000	.006	.159	.012	0.000	.073
.413	.319	0.000	.313	.000	0.000	0.000	.124	.084	.053	0.000	0.000	0.000	0.000	0.000	.031
.392	.118	0.000	.362	.000	0.000	0.000	.151	.077	0.000	0.000	0.000	0.000	0.000	0.000	.014
.370	.045	0.000	.356	.000	0.000	0.000	.172	.046	0.000	0.000	0.000	0.000	0.000	0.000	.005
.349	.011	0.000	.290	.000	0.000	0.000	.194	.006	0.000	0.000	0.000	0.000	0.000	0.000	.003
.328	.001	0.000	.133	.000	0.000	0.000	.215	.000	0.000	0.000	0.000	0.000	0.000	0.000	.000
0.000	0.000	0.000	0.000	.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.448004	1.919539		.442411	1.920599		.530439	1.927293		.412767	1.950630					
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A					
.003461	.000551		.013569	.023333		.023491	.043424		.021817	.090077					
VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B					
.001855	.004605		.005996	.019854		.019452	.025961		.022522	.067691					
AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T					
.4165	.4863		.1264	.1484		.1173	.0810		.0703	.0552					

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 1.88				FROUDE NO. = 29.20											
STATION 5.00				STATION 0.00				STATION 0.00				STATION 0.00			
VERTICAL	HORIZ	Y/D	Z/HW	VERTICAL	HORIZ	Y/D	Z/HW	VERTICAL	HORIZ	Y/D	Z/HW	VERTICAL	HORIZ	Y/D	Z/HW
Y/D	DT	DT	DT	Y/D	DT	DT	DT	Y/D	DT	DT	DT	Y/D	DT	DT	DT
.952	.069	.516	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.899	.066	.473	.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.847	.113	.430	.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.794	.086	.387	.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.741	.110	.344	.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.688	.107	.301	.033	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.635	.117	.258	.047	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.582	.125	.215	.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.529	.115	.172	.057	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.476	.110	.129	.051	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.423	.096	.086	.062	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.370	.079	.043	.067	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.317	.045	0.000	.116	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.265	.059	0.000	.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.212	.053	0.000	.049	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	.129	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	.172	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	.215	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	.258	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	.301	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	.344	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	.387	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	.430	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	.473	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	.516	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.378195	1.882375		0.000000	0.000000		0.000000	0.000000		0.000000	0.000000		0.000000	0.000000		0.000000
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A
.003461	.000551		.013569	.023333		.023491	.043424		.021817	.090077		.021817	.090077		.090077
VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B
.001855	.004605		.005996	.019854		.019452	.025961		.022522	.067691		.022522	.067691		.067691
AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T
.4165	.4863		.1264	.1484		.1173	.0810		.0703	.0552		.0703	.0552		.0552

TABLE 8 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 2.52				FROUDE NO. = 38.80				STATION 2.00				STATION 3.00			
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.794	0.000	.129	0.000	.899	0.000	.215	0.000	.952	0.013	.301	0.000	.952	0.010	.387	0.000
.772	.016	.118	.011	.897	.021	.194	.026	.899	.020	.258	.005	.899	.036	.344	.014
.751	.113	.108	.022	.794	.035	.172	.048	.847	.034	.215	.025	.847	.054	.301	.045
.730	.120	.097	.043	.741	.048	.151	.077	.794	.059	.172	.077	.794	.171	.258	.063
.709	.226	.086	.121	.688	.128	.129	.100	.741	.094	.129	.059	.741	.145	.215	.052
.688	.346	.075	.142	.635	.227	.108	.160	.688	.184	.086	.230	.688	.127	.172	.086
.667	.340	.065	.137	.582	.412	.086	.262	.635	.353	.043	.341	.635	.217	.129	.130
.646	.734	.054	.105	.529	.721	.065	.241	.582	.155	0.000	.326	.582	.187	.086	.102
.624	1.132	.043	.344	.476	.436	.043	.492	.529	.339	.043	.256	.529	.196	.043	.173
.603	1.644	.032	.904	.423	.266	.022	.604	.476	.175	.086	.181	.476	.186	0.000	.239
.582	1.645	.022	2.110	.370	.212	0.000	.682	.423	.165	.129	.150	.423	.153	.043	.220
.561	1.134	.011	1.384	.317	.177	.022	.581	.370	.201	.172	.030	.370	.103	.086	.178
.540	2.160	0.000	1.530	.265	.097	.043	.385	.317	.040	.215	.010	.317	.073	.129	.121
.519	1.862	.011	1.563	.212	.081	.065	.323	.265	.034	.258	.007	.265	.036	.172	.114
.497	1.398	.022	1.498	.159	.017	.086	.400	.212	.023	.301	0.000	.212	.024	.215	.030
.476	1.245	.032	.902	.106	0.000	.108	.156	.159	.010	0.000	0.000	.000	0.000	.258	.025
.455	.428	.043	.346	0.000	0.000	.129	.032	0.000	0.000	0.000	0.000	0.000	0.000	.301	.009
.434	.672	.054	.445	0.000	0.000	.151	.038	0.000	0.000	0.000	0.000	0.000	0.000	.344	.003
.413	.475	.065	.124	0.000	0.000	.172	.057	0.000	0.000	0.000	0.000	0.000	0.000	.387	0.000
.392	.360	.075	.178	0.000	0.000	.194	.028	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.370	.275	.086	.018	0.000	0.000	.215	.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.349	.168	.097	.092	0.000	0.000	.237	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.328	.072	.108	.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.307	.039	.118	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.286	.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.432874	1.935989			.473663	1.937248			.425461	1.929420			.397911	1.917244		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.005403	.004141			.014171	.014320			.019429	.029169			.023525	.068631		
VARIANCE H	VARIANCE H			VARIANCE H	VARIANCE H			VARIANCE H	VARIANCE H			VARIANCE H	VARIANCE H		
.004208	.002388			.006335	.014094			.011977	.027388			.023886	.049826		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.7025	.5169			.1798	.2214			.1218	.1132			.1132	.0845		

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 2.52				FROUDE NO. = 38.80				STATION 5.00				STATION 6.00			
STATION 5.00				STATION 6.00				STATION 7.00				STATION 8.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.952	.016	.430	.000	.952	.031	.473	0.000	.952	.031	.473	0.000	.952	.031	.473	0.000
.899	.041	.387	.004	.899	.024	.430	.002	.899	.024	.430	.002	.899	.024	.430	.002
.847	.029	.344	.011	.847	.029	.387	.003	.847	.029	.387	.003	.847	.029	.387	.003
.794	.061	.301	.022	.794	.051	.344	.032	.794	.051	.344	.032	.794	.051	.344	.032
.741	.074	.258	.018	.741	.046	.301	.020	.741	.046	.301	.020	.741	.046	.301	.020
.688	.101	.215	.041	.688	.028	.258	.023	.688	.028	.258	.023	.688	.028	.258	.023
.635	.094	.172	.057	.635	.062	.215	.036	.635	.062	.215	.036	.635	.062	.215	.036
.582	.129	.129	.070	.582	.063	.172	.044	.582	.063	.172	.044	.582	.063	.172	.044
.529	.119	.086	.130	.529	.091	.129	.024	.529	.091	.129	.024	.529	.091	.129	.024
.476	.096	.043	.115	.476	.065	.086	.067	.476	.065	.086	.067	.476	.065	.086	.067
.423	.102	0.000	.142	.423	.056	.043	.054	.423	.056	.043	.054	.423	.056	.043	.054
.370	.134	.043	.134	.370	.045	0.000	.094	.370	.045	0.000	.094	.370	.045	0.000	.094
.317	.096	.086	.097	.317	.036	.043	.054	.317	.036	.043	.054	.317	.036	.043	.054
.265	.078	.129	.092	.265	.029	.086	.053	.265	.029	.086	.053	.265	.029	.086	.053
.212	.071	.172	.061	.212	.023	.129	.042	.212	.023	.129	.042	.212	.023	.129	.042
.159	.052	.215	.040	.159	.017	.172	.024	.159	.017	.172	.024	.159	.017	.172	.024
.106	.042	.258	.018	0.000	0.000	.215	.036	0.000	0.000	.215	.036	0.000	0.000	.215	.036
0.000	0.000	.301	.003	0.000	0.000	.258	.024	0.000	0.000	.258	.024	0.000	0.000	.258	.024
0.000	0.000	.344	.005	0.000	0.000	.301	.007	0.000	0.000	.301	.007	0.000	0.000	.301	.007
0.000	0.000	.387	.000	0.000	0.000	.344	.005	0.000	0.000	.344	.005	0.000	0.000	.344	.005
0.000	0.000	.430	.000	0.000	0.000	.387	.004	0.000	0.000	.387	.004	0.000	0.000	.387	.004
0.000	0.000	0.000	0.000	0.000	0.000	.430	.004	0.000	0.000	.430	.004	0.000	0.000	.430	.004
0.000	0.000	0.000	0.000	0.000	0.000	.473	0.000	0.000	0.000	.473	0.000	0.000	0.000	.473	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.474477	1.922776			.413721	1.940156			0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.074413	.064451			.036456	.111754			0.000000	0.000000			0.000000	0.000000		
VARIANCE H	VARIANCE H			VARIANCE H	VARIANCE H			VARIANCE H	VARIANCE H			VARIANCE H	VARIANCE H		
.037711	.041421			.021794	.054623			0.000000	0.000000			0.000000	0.000000		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.0744	.0506			.0436	.0287			0.0000	0.0000			0.0000	0.0000		

TABLE 8 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM
JET STRENGTH = 4.44 FROUDE NO. = 66.40

STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	HORIZ	Y/D = .55		VERTICAL	HORIZ	Y/D = .53		VERTICAL	HORIZ	Y/D = .53		VERTICAL	HORIZ	Y/D = .53	
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.744	0.000	.118	0.000	.847	0.000	.215	0.000	.847	0.000	.215	0.000	.452	.025	.344	0.000
.772	.017	.108	.018	.794	.035	.194	.007	.847	.013	.215	.023	.844	.040	.301	.010
.751	.048	.047	.060	.741	.114	.172	.007	.847	.015	.172	.064	.847	.105	.258	.021
.730	.048	.046	.043	.688	.139	.151	.027	.744	.083	.124	.184	.744	.125	.215	.058
.704	.074	.075	.177	.635	.288	.124	.300	.741	.064	.086	.293	.741	.117	.172	.060
.688	.091	.065	.483	.582	.664	.108	.411	.688	.213	.043	.286	.688	.150	.124	.122
.667	.108	.054	.845	.524	.855	.086	.330	.635	.247	0.000	.384	.635	.178	.086	.175
.646	.312	.043	1.449	.476	.904	.065	.194	.582	.224	-.043	.266	.582	.273	.043	.135
.624	.639	.032	1.733	.423	.684	.043	.445	.524	.101	-.086	.223	.524	.284	0.000	.247
.603	1.018	.022	2.362	.370	.430	.022	.781	.476	.267	-.124	.212	.476	.196	-.043	.245
.582	1.638	.011	2.300	.317	.215	0.000	.966	.423	.370	-.172	.105	.423	.148	-.086	.196
.561	1.792	0.000	2.440	.265	.094	-.022	.943	.370	.273	-.215	.054	.370	.107	-.124	.188
.540	2.270	-.011	1.671	.212	.071	-.043	.873	.317	.175	-.258	.033	.317	.089	-.172	.126
.519	2.188	-.022	1.059	.154	.030	-.065	.763	.265	.153	-.301	.002	.265	.075	-.215	.077
.497	1.530	-.032	.811	.106	.008	-.086	.501	.212	.142	0.000	0.000	.212	.049	-.258	.026
.476	1.708	-.043	.501	0.000	0.000	-.108	.348	.154	.084	0.000	0.000	.154	.061	-.301	.016
.455	.966	-.054	.270	0.000	0.000	-.124	.214	.106	.064	0.000	0.000	.106	.018	-.344	.001
.434	.364	-.065	.100	0.000	0.000	-.151	.108	0.000	0.000	0.000	0.000	0.000	0.000	-.387	0.000
.413	.139	-.075	.104	0.000	0.000	-.172	.054	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.392	.252	-.086	.051	0.000	0.000	-.184	.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.370	.058	-.097	.047	0.000	0.000	-.215	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.349	.043	-.108	.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.328	0.000	-.118	.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.440472		1.917363		.481677		1.957629		.503467		1.954132		.423534		1.977514	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.003416		.003714		.011713		.018154		.027937		.039493		.030888		.054181	
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B	
.002886		.003217		.009429		.015688		.018087		.034318		.020091		.038991	
AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T	
.6646		.7240		.3030		.3466		.1486		.1529		.1200		.0973	

MEDIUM NOZZLE DIAMETER = 1.094CM
JET STRENGTH = 4.44 FROUDE NO. = 66.40

STATION 5.00				STATION 6.00				STATION 7.00				STATION 8.00			
VERTICAL	HORIZ	Y/D = .53		VERTICAL	HORIZ	Y/D = .54		VERTICAL	HORIZ	Y/D = .54		VERTICAL	HORIZ	Y/D = 0.00	
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.952	.037	.430	0.000	.452	.020	.473	0.000	.952	.023	.516	0.000	0.000	0.000	0.000	0.000
.899	.041	.387	.006	.899	.015	.430	.012	.899	.028	.473	.003	0.000	0.000	0.000	0.000
.847	.072	.364	.014	.847	.038	.387	.027	.847	.040	.430	.008	0.000	0.000	0.000	0.000
.794	.108	.301	.054	.794	.051	.344	.030	.794	.088	.377	.016	0.000	0.000	0.000	0.000
.741	.101	.258	.047	.741	.041	.301	.038	.741	.093	.344	.032	0.000	0.000	0.000	0.000
.688	.167	.215	.043	.688	.107	.258	.045	.688	.083	.301	.021	0.000	0.000	0.000	0.000
.635	.147	.172	.057	.635	.176	.215	.084	.635	.121	.258	.043	0.000	0.000	0.000	0.000
.582	.173	.129	.094	.582	.150	.172	.136	.582	.146	.215	.090	0.000	0.000	0.000	0.000
.529	.216	.086	.111	.529	.112	.124	.137	.529	.153	.172	.065	0.000	0.000	0.000	0.000
.476	.139	.043	.200	.476	.173	.086	.110	.476	.144	.129	.067	0.000	0.000	0.000	0.000
.423	.116	0.000	.238	.423	.121	.043	.172	.423	.133	.086	.091	0.000	0.000	0.000	0.000
.370	.124	-.043	.225	.370	.040	0.000	.176	.370	.108	.043	.111	0.000	0.000	0.000	0.000
.317	.102	-.086	.215	.317	.064	-.043	.127	.317	.083	0.000	.142	0.000	0.000	0.000	0.000
.265	.080	-.129	.142	.265	.051	-.086	.168	.265	.085	-.043	.116	0.000	0.000	0.000	0.000
.212	.055	-.172	.097	.212	.039	-.124	.117	.212	.074	-.086	.091	0.000	0.000	0.000	0.000
.159	.014	-.215	.057	.159	.030	-.172	.065	.159	.053	-.129	.112	0.000	0.000	0.000	0.000
0.000	0.000	-.258	.027	.106	.014	-.215	.078	.106	.034	-.172	.077	0.000	0.000	0.000	0.000
0.000	0.000	-.301	.014	0.000	0.000	-.258	.047	0.000	0.000	-.215	.055	0.000	0.000	0.000	0.000
0.000	0.000	-.344	.010	0.000	0.000	-.301	.021	0.000	0.000	-.258	.045	0.000	0.000	0.000	0.000
0.000	0.000	-.367	.004	0.000	0.000	-.344	.014	0.000	0.000	-.301	.034	0.000	0.000	0.000	0.000
0.000	0.000	-.430	.001	0.000	0.000	-.387	.009	0.000	0.000	-.344	.030	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.430	.002	0.000	0.000	-.387	.023	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.473	.000	0.000	0.000	-.430	.018	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.473	.011	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.516	.003	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.559	.001	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.416443		1.946399		.447161		1.876128		.447362		1.944060		.400000		0.000000	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.011113		.017744		.027436		.107326		.036324		.137194		0.000000		0.000000	
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B	
.023644		.053644		.020471		.022446		.016377		.043115		0.000000		0.000000	
AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T		AVERAGE T	
.1054		.0740		.0763		.0702		.0817		.0501		0.0000		0.0000	

TABLE 8 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 7.63								FROUDE NO. = 115.00							
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.772	0.000	.118	0.000	.899	0.000	.215	0.000	.952	0.000	.344	0.000	.952	0.000	.344	0.000
.751	.022	.108	.027	.847	.031	.194	.012	.899	.154	.301	.012	.899	.084	.301	.043
.730	.047	.097	.174	.794	.081	.172	.134	.847	.171	.258	.060	.847	.120	.258	.046
.709	.078	.086	.274	.741	.118	.151	.146	.794	.230	.215	.084	.794	.153	.215	.034
.688	.102	.075	.412	.688	.274	.129	.317	.741	.216	.172	.136	.741	.129	.172	.162
.667	.144	.065	.582	.635	.503	.108	.361	.688	.636	.129	.313	.688	.216	.129	.217
.646	.354	.054	1.484	.582	1.064	.086	.317	.635	.744	.086	.606	.635	.352	.086	.303
.624	1.000	.043	2.046	.524	1.141	.065	.552	.582	.719	.043	.908	.582	.470	.043	.476
.603	1.500	.032	2.670	.476	.883	.043	1.116	.524	.877	0.000	.858	.524	.597	0.000	.621
.582	2.085	.022	2.464	.423	.853	.022	1.141	.476	.964	-.043	.816	.476	.521	-.043	.625
.561	2.340	.011	2.337	.370	-.21	0.000	1.190	.423	.694	-.086	.536	.423	.423	-.086	.491
.540	1.950	0.000	2.512	.317	.315	-.022	1.185	.370	.521	-.129	.389	.370	.308	-.129	.375
.519	2.046	-.011	1.434	.265	.248	-.043	.613	.317	.408	-.172	.163	.317	.203	-.172	.272
.497	1.814	-.022	1.542	.212	.060	-.065	.491	.265	.181	-.215	.080	.265	.149	-.215	.141
.476	1.177	-.032	.854	.159	.025	-.086	.293	.212	.036	-.258	.048	.212	.045	-.258	.105
.455	1.058	-.043	.496	.106	0.000	-.108	.267	.159	.007	-.301	.021	.159	.062	-.301	.043
.434	.662	-.054	.288	0.000	0.000	-.129	.203	.106	.002	-.344	.003	.106	.029	-.344	.054
.413	.238	-.065	.153	0.000	0.000	-.151	.127	0.000	0.000	0.000	0.000	0.000	0.000	-.387	.013
.392	.116	-.075	.050	0.000	0.000	-.172	.078	0.000	0.000	0.000	0.000	0.000	0.000	-.430	.002
.370	.047	-.086	.016	0.000	0.000	-.194	.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.349	.022	-.097	.009	0.000	0.000	-.215	.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.328	.003	-.108	.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.434934	1.905652			.467374	1.923319			.431220	1.938541			.446990	1.992465		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.003403	.004047			.013162	.018500			.021087	.037548			.026707	.059813		
VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B		
.003286	.004229			.010633	.014294			.018537	.033977			.017234	.047080		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.7642	.9496			.3848	.4076			.3883	.2962			.2338	.2148		

MEDIUM NOZZLE DIAMETER = 1.094CM															
JET STRENGTH = 7.63								FROUDE NO. = 115.00							
STATION 5.00				STATION 6.00				STATION 7.00				STATION 8.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.952	.070	.430	0.000	.952	.026	.473	0.000	.952	.060	.516	0.000	.952	.029	.559	0.000
.899	.074	.387	.019	.899	.102	.430	.010	.899	.048	.473	.005	.899	.077	.516	.006
.847	.109	.344	.038	.847	.150	.387	.018	.847	.091	.430	.021	.847	.129	.473	.008
.794	.213	.301	.074	.794	.156	.344	.033	.794	.140	.387	.094	.794	.165	.430	.012
.741	.299	.258	.176	.741	.171	.301	.102	.741	.155	.344	.051	.741	.172	.387	.020
.688	.238	.215	.243	.688	.287	.258	.116	.688	.236	.301	.078	.688	.146	.344	.079
.635	.313	.172	.154	.635	.286	.215	.131	.635	.216	.258	.048	.635	.158	.301	.061
.582	.454	.129	.270	.582	.270	.172	.214	.582	.275	.215	.144	.582	.172	.258	.126
.529	.402	.086	.421	.529	.288	.129	.232	.529	.271	.172	.159	.529	.183	.215	.112
.476	.409	.043	.339	.476	.331	.086	.258	.476	.236	.129	.130	.476	.204	.172	.124
.423	.338	0.000	.483	.423	.304	.043	.242	.423	.221	.086	.261	.423	.162	.129	.195
.370	.342	-.043	.360	.370	.263	0.000	.318	.370	.193	.043	.269	.370	.140	.086	.218
.317	.313	-.066	.338	.317	.201	-.043	.247	.317	.149	0.000	.242	.317	.112	.043	.228
.265	.249	-.179	.295	.265	.156	-.086	.208	.265	.121	-.043	.250	.265	.098	0.000	.210
.212	.097	-.172	.138	.212	.120	-.129	.208	.212	.101	-.086	.243	.212	.081	-.043	.170
.159	.135	-.215	.070	.159	.065	-.172	.198	.159	.084	-.129	.254	.159	.066	-.086	.195
.106	.075	-.258	.037	0.000	0.000	-.215	.190	.106	.062	-.172	.167	.106	.050	-.129	.166
0.000	0.000	-.301	.025	0.000	0.000	-.258	.132	0.000	0.000	-.215	.145	0.000	0.000	-.172	.134
0.000	0.000	-.344	.017	0.000	0.000	-.301	.085	0.000	0.000	-.258	.095	0.000	0.000	-.215	.065
0.000	0.000	-.387	.010	0.000	0.000	-.344	.025	0.000	0.000	-.301	.061	0.000	0.000	-.258	.039
0.000	0.000	-.430	.001	0.000	0.000	-.387	.015	0.000	0.000	-.344	.035	0.000	0.000	-.301	.045
0.000	0.000	0.000	0.000	0.000	0.000	-.430	.007	0.000	0.000	-.387	.014	0.000	0.000	-.344	.035
0.000	0.000	0.000	0.000	0.000	0.000	-.473	.000	0.000	0.000	-.430	.012	0.000	0.000	-.387	.024
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.473	.003	0.000	0.000	-.430	.012
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.516	.002	0.000	0.000	-.473	.002
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.516	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.458167	1.880572			.437130	1.935193			.445787	1.927983			.477584	1.883237		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.074178	.075625			.032435	.107403			.036387	.125468			.040447	.114801		
VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B		
.072547	.058334			.035629	.100147			.035445	.120529			.042454	.111148		
AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T			AVERAGE T	AVERAGE T		
.2440	.1671			.1986	.1316			.1563	.1091			.1263	.0874		

TABLE 8 - continued

LARGE NOZZLE DIAMETER = 1.882CM
JET STRENGTH = .59 FROUDE NO. = 5.25

STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	DT	HORIZ	Y/D = .54	VERTICAL	DT	HORIZ	Y/D = .54	VERTICAL	DT	HORIZ	Y/D = .54	VERTICAL	DT	HORIZ	Y/D = .54
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.757	0.000	.124	0.000	.894	0.000	.270	0.000	.894	0.000	.344	0.000	.894	0.035	.430	0.000
.735	.031	.118	.035	.891	.048	.277	.009	.891	.047	.301	.014	.891	.021	.387	.006
.714	.055	.108	.266	.788	.109	.215	.038	.768	.141	.258	.030	.788	.084	.344	.014
.693	.063	.097	.481	.735	.276	.154	.072	.705	.183	.215	.044	.735	.131	.301	.047
.672	.474	.086	.244	.683	.424	.172	.113	.683	.185	.172	.075	.683	.139	.258	.019
.651	.174	.075	.496	.630	.424	.151	.060	.630	.264	.129	.097	.630	.131	.215	.079
.630	.231	.065	.384	.577	.420	.129	.164	.577	.231	.086	.174	.577	.137	.172	.050
.604	.354	.054	.551	.524	.373	.104	.137	.524	.262	.043	.192	.524	.154	.129	.084
.587	.303	.043	.752	.471	.427	.098	.232	.471	.172	0.000	.193	.471	.176	.086	.118
.566	.824	.032	.622	.418	.310	.065	.256	.418	.182	-.043	.204	.418	.145	.043	.139
.545	.770	.022	.966	.365	.230	.043	.321	.365	.155	-.066	.232	.365	.128	0.000	.154
.524	.788	.011	.818	.312	.170	.022	.368	.312	.133	-.129	.160	.312	.111	-.043	.137
.503	.602	0.000	.876	.259	.124	0.000	.440	.259	.102	-.172	.084	.259	.085	-.086	.123
.481	.557	-.011	1.044	.208	.056	-.022	.309	.208	.085	-.215	.034	.208	.065	-.129	.106
.460	.431	-.022	.757	.153	.026	-.043	.431	.153	.065	-.258	.034	.153	.045	-.172	.092
.439	.363	-.032	.609	0.000	0.000	-.066	.335	.101	.042	-.301	.018	.101	.020	-.215	.072
.418	.187	-.043	.545	0.000	0.000	-.086	.291	0.000	0.000	-.344	.006	0.000	0.000	-.258	.044
.397	.090	-.054	.352	0.000	0.000	-.104	.176	0.000	0.000	-.387	0.000	0.000	0.000	-.301	.030
.376	.041	-.065	.519	0.000	0.000	-.129	.164	0.000	0.000	0.000	0.000	0.000	0.000	-.344	.015
.354	.039	-.075	.360	0.000	0.000	-.151	.223	0.000	0.000	0.000	0.000	0.000	0.000	-.387	.006
.333	.009	-.086	.216	0.000	0.000	-.172	.197	0.000	0.000	0.000	0.000	0.000	0.000	-.430	.000
.312	0.000	-.097	.126	0.000	0.000	-.194	.115	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.108	.055	0.000	0.000	-.215	.057	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.118	.015	0.000	0.000	-.237	.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.129	.009	0.000	0.000	-.258	.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.140	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.435462	1.922796		.436354	1.968822		.443891	1.962579		.463835	1.953690					
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A					
.005198	.009784		.020043	.037522		.033696	.058245		.031217	.093021					
VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B					
.003870	.007811		.025129	.029357		.029505	.053632		.031983	.083044					
AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T					
.2920	.4270		.2281	.1814		.1454	.0898		.1003	.0636					

LARGE NOZZLE DIAMETER = 1.882CM
JET STRENGTH = .59 FROUDE NO. = 5.25

STATION 5.00				STATION 6.00				STATION 7.00				STATION 8.00			
VERTICAL	DT	HORIZ	Y/D = .60	VERTICAL	DT	HORIZ	Y/D = 0.00	VERTICAL	DT	HORIZ	Y/D = 0.00	VERTICAL	DT	HORIZ	Y/D = 0.00
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.894	.016	.516	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.841	.026	.473	.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.788	.034	.430	.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.735	.045	.387	.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.683	.055	.344	.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.630	.065	.301	.041	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.577	.096	.258	.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.524	.078	.215	.026	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.471	.113	.172	.037	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.418	.116	.129	.076	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.365	.089	.086	.061	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.312	.076	.043	.058	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.259	.065	0.000	.104	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.206	.056	-.043	.059	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.153	.046	-.086	.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.101	.030	-.129	.028	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.048	.028	-.172	.032	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.215	.041	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.258	.026	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.301	.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.344	.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.387	.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.430	.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.473	.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.516	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.511844	1.844165		0.000000	0.000000		0.000000	0.000000		0.000000	0.000000		0.000000	0.000000		
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		
.035414	.121765		0.000000	0.000000		0.000000	0.000000		0.000000	0.000000		0.000000	0.000000		
VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		
.032142	.051544		0.000000	0.000000		0.000000	0.000000		0.000000	0.000000		0.000000	0.000000		
AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		AVERAGE T	AVERAGE T		
.0627	.0240		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		

TABLE 8 - continued

LARGE NOZZLE DIAMETER = 1.882CM											
JET STRENGTH = 1.07						FROUDE NO. = 10.20					
STATION 1.00				STATION 2.00				STATION 3.00			
VERTICAL	DT	Y/D	DT	VERTICAL	DT	Y/D	DT	VERTICAL	DT	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.775	0.000	.129	0.000	.880	.060	.215	0.000	.880	.086	.301	0.000
.757	.015	.116	.039	.828	.100	.194	.040	.828	.117	.280	.015
.732	.200	.108	.070	.775	.277	.172	.040	.775	.177	.258	.043
.711	.365	.097	.120	.722	.289	.151	.028	.722	.279	.237	.036
.690	.555	.086	.190	.664	.443	.124	.098	.669	.288	.215	.047
.669	.722	.075	.268	.616	.530	.108	.132	.616	.357	.194	.101
.648	.827	.065	.384	.563	.712	.086	.239	.563	.249	.172	.107
.626	.962	.054	.435	.510	.617	.065	.209	.510	.381	.151	.129
.605	1.422	.043	.558	.457	.728	.043	.410	.457	.348	.129	.116
.584	1.812	.032	.711	.404	.580	.022	.703	.404	.321	.108	.159
.563	1.525	.022	1.149	.351	.517	0.000	.728	.351	.269	.086	.197
.542	1.207	.011	1.339	.294	.413	-.022	.584	.294	.221	.065	.112
.521	1.507	0.000	1.816	.246	.292	-.043	.607	.246	.187	.043	.193
.499	1.177	-.011	1.717	.193	.160	-.065	.574	.193	.121	.022	.242
.478	.632	-.022	1.133	.140	.087	-.086	.328	.140	.132	0.000	.381
.457	.897	-.032	.818	.087	.043	-.108	.235	.087	.091	-.022	.263
.436	.515	-.043	.722	0.000	0.000	-.129	.160	.043	.071	-.043	.255
.415	.312	-.054	.578	0.000	0.000	-.151	.103	0.000	0.000	-.065	.225
.394	.327	-.065	.558	0.000	0.000	-.172	.048	0.000	0.000	-.086	.176
.372	.170	-.075	.375	0.000	0.000	-.194	.040	0.000	0.000	-.108	.142
.351	.057	-.086	.524	0.000	0.000	-.215	.017	0.000	0.000	-.129	.074
.330	.025	-.097	.232	0.000	0.000	-.237	0.000	0.000	0.000	-.151	.055
.309	.030	-.108	.107	0.000	0.000	0.000	0.000	0.000	0.000	-.172	.090
.288	.005	-.118	.055	0.000	0.000	0.000	0.000	0.000	0.000	-.194	.036
.267	0.000	-.129	.003	0.000	0.000	0.000	0.000	0.000	0.000	-.215	.020
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.237	.010
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.258	.009
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.280	.001
MEAN			MEAN			MEAN		MEAN			MEAN
.416847			1.951564			.477754		.482379			.419173
VARIANCE A			VARIANCE A			VARIANCE A		VARIANCE A			VARIANCE A
.006149			.007205			.024918		.037207			.042438
VARIANCE B			VARIANCE B			VARIANCE B		VARIANCE B			VARIANCE B
.004550			.003933			.025146		.036831			.019867
AVERAGE T			AVERAGE T			AVERAGE T		AVERAGE T			AVERAGE T
.6127			.5482			.3650		.2203			.1154

LARGE NOZZLE DIAMETER = 1.882CM											
JET STRENGTH = 1.07						FROUDE NO. = 10.20					
STATION 5.00				STATION 6.00				STATION 0.00			
VERTICAL	DT	Y/D	DT	VERTICAL	DT	Y/D	DT	VERTICAL	DT	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.933	.021	.516	0.000	0.000	0.000	.559	0.000	0.000	0.000	0.000	0.000
.880	.026	.473	.018	0.000	0.000	.516	.006	0.000	0.000	0.000	0.000
.828	.060	.430	.050	0.000	0.000	.473	.013	0.000	0.000	0.000	0.000
.775	.089	.387	.067	0.000	0.000	.430	.019	0.000	0.000	0.000	0.000
.722	.062	.344	.084	0.000	0.000	.387	.019	0.000	0.000	0.000	0.000
.669	.131	.301	.094	0.000	0.000	.344	.013	0.000	0.000	0.000	0.000
.616	.180	.258	.116	0.000	0.000	.301	.033	0.000	0.000	0.000	0.000
.563	.161	.215	.160	0.000	0.000	.258	.062	0.000	0.000	0.000	0.000
.510	.197	.172	.128	0.000	0.000	.215	.064	0.000	0.000	0.000	0.000
.457	.120	.129	.153	0.000	0.000	.172	.120	0.000	0.000	0.000	0.000
.404	.106	.086	.129	0.000	0.000	.129	.128	0.000	0.000	0.000	0.000
.351	.078	.043	.157	0.000	0.000	.086	.118	0.000	0.000	0.000	0.000
.298	.054	0.000	.182	0.000	0.000	.043	.131	0.000	0.000	0.000	0.000
.246	.039	-.043	.157	0.000	0.000	0.000	.157	0.000	0.000	0.000	0.000
.193	.027	-.086	.101	0.000	0.000	-.043	.128	0.000	0.000	0.000	0.000
.140	.020	-.129	.111	0.000	0.000	-.086	.110	0.000	0.000	0.000	0.000
.087	.029	-.172	.052	0.000	0.000	-.129	.088	0.000	0.000	0.000	0.000
.034	.018	-.215	.057	0.000	0.000	-.172	.066	0.000	0.000	0.000	0.000
0.000	0.000	-.258	.199	0.000	0.000	-.215	.102	0.000	0.000	0.000	0.000
0.000	0.000	-.301	.064	0.000	0.000	-.258	.077	0.000	0.000	0.000	0.000
0.000	0.000	-.344	.021	0.000	0.000	-.301	.046	0.000	0.000	0.000	0.000
0.000	0.000	-.387	.011	0.000	0.000	-.344	.021	0.000	0.000	0.000	0.000
0.000	0.000	-.430	.033	0.000	0.000	-.387	.011	0.000	0.000	0.000	0.000
0.000	0.000	-.473	.024	0.000	0.000	-.430	.023	0.000	0.000	0.000	0.000
0.000	0.000	-.516	.067	0.000	0.000	-.473	.022	0.000	0.000	0.000	0.000
0.000	0.000	-.559	.060	0.000	0.000	-.516	.066	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.559	.095	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.602	0.000	0.000	0.000	0.000	0.000
MEAN			MEAN			MEAN		MEAN			MEAN
.440097			1.865554			.447133		.460000			.460000
VARIANCE A			VARIANCE A			VARIANCE A		VARIANCE A			VARIANCE A
.011406			.016666			.150947		.000000			.000000
VARIANCE B			VARIANCE B			VARIANCE B		VARIANCE B			VARIANCE B
.002004			.014412			.112612		.000000			.000000
AVERAGE T			AVERAGE T			AVERAGE T		AVERAGE T			AVERAGE T
.0787			.0892			.0556		.00000			.00000

TABLE 8 - continued

LARGE NOZZLE DIAMETER = 1.882CM															
JET STRENGTH = 1.88				FROUDE NO. = 19.10				STATION 3.00				STATION 4.00			
STATION 1.00				STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	DT	HORIZ	Y/D = .56	VERTICAL	DT	HORIZ	Y/D = .56	VERTICAL	DT	HORIZ	Y/D = .56	VERTICAL	DT	HORIZ	Y/D = .56
Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW	
.691	0.000	.129	0.000	.829	.048	.172	0.000	.934	0.000	.301	0.000	.934	.109	.430	0.000
.670	.323	.118	.043	.776	.250	.151	.072	.881	.117	.280	.074	.881	.324	.387	.018
.679	.704	.108	.074	.723	.324	.129	.046	.829	.710	.258	.070	.829	.242	.344	.037
.628	1.305	.097	.123	.670	.753	.108	.263	.776	.496	.237	.091	.776	.354	.301	.032
.606	2.214	.086	.148	.617	.947	.086	.357	.723	.570	.215	.137	.723	.407	.258	.088
.585	2.559	.075	.234	.554	1.377	.065	.475	.670	.706	.194	.164	.670	.483	.215	.096
.564	3.475	.065	.351	.511	1.471	.043	.497	.517	.922	.172	.180	.517	.446	.172	.107
.543	4.260	.054	.463	.458	1.227	.022	1.414	.564	1.267	.151	.281	.564	.451	.129	.215
.522	4.277	.043	.586	.405	.891	0.000	1.508	.511	1.212	.129	.362	.511	.461	.086	.219
.501	3.541	.032	1.311	.352	.400	-.022	1.473	.458	.734	.108	.456	.458	.485	.043	.329
.479	2.728	.027	1.564	.294	.041	-.043	1.062	.405	.441	.086	.506	.405	.456	0.000	.587
.458	2.493	.011	2.437	.247	.071	-.065	.553	.352	.349	.065	.606	.352	.397	-.043	.538
.437	1.870	0.000	4.480	.194	0.000	-.086	.475	.249	.197	.043	.891	.299	.329	-.086	.546
.416	1.239	-.011	3.618	0.000	0.000	-.108	.432	.247	.123	.022	1.043	.247	.176	-.129	.413
.395	1.063	-.022	3.335	0.000	0.000	-.129	.086	.194	.061	0.000	.734	.194	.222	-.172	.383
.374	.477	-.032	2.763	0.000	0.000	-.151	.112	.141	.023	-.022	.897	.141	.166	-.215	.196
.352	.352	-.043	1.871	0.000	0.000	-.172	.020	.088	.007	-.043	.618	.088	.198	-.258	.171
.331	0.000	-.054	1.348	0.000	0.000	-.194	0.000	.035	.001	-.065	.606	.035	.125	-.301	.123
0.000	0.000	-.065	1.563	0.000	0.000	0.000	0.000	0.000	0.000	-.086	.688	0.000	0.000	-.344	.070
0.000	0.000	-.075	.874	0.000	0.000	0.000	0.000	0.000	0.000	-.108	.515	0.000	0.000	-.387	.027
0.000	0.000	-.086	.338	0.000	0.000	0.000	0.000	0.000	0.000	-.129	.359	0.000	0.000	-.430	0.000
0.000	0.000	-.097	.209	0.000	0.000	0.000	0.000	0.000	0.000	-.151	.183	0.000	0.000	0.000	0.000
0.000	0.000	-.108	.111	0.000	0.000	0.000	0.000	0.000	0.000	-.172	.155	0.000	0.000	0.000	0.000
0.000	0.000	-.118	.068	0.000	0.000	0.000	0.000	0.000	0.000	-.194	.106	0.000	0.000	0.000	0.000
0.000	0.000	-.129	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.215	.061	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.237	.033	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.258	.018	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.280	0.000	0.000	0.000	0.000	0.000
MEAN	1.943210	MEAN	1.940451	MEAN	1.947479	MEAN	1.947479	MEAN	1.923364	MEAN	1.923364	MEAN	1.923364	MEAN	2.027968
VARIANCE A	.004168	VARIANCE A	.005116	VARIANCE A	.010473	VARIANCE A	.012531	VARIANCE A	.018668	VARIANCE A	.036060	VARIANCE A	.045516	VARIANCE A	.078048
VARIANCE H	.003565	VARIANCE H	.002774	VARIANCE H	.010963	VARIANCE H	.010564	VARIANCE H	.013924	VARIANCE H	.022649	VARIANCE H	.044318	VARIANCE H	.056365
AVERAGE T	1.7711	AVERAGE T	1.1355	AVERAGE T	.5954	AVERAGE T	.5180	AVERAGE T	.4164	AVERAGE T	.3502	AVERAGE T	.3296	AVERAGE T	.1996

LARGE NOZZLE DIAMETER = 1.882CM															
JET STRENGTH = 1.88				FROUDE NO. = 19.10				STATION 5.00				STATION 6.00			
STATION 5.00				STATION 6.00				STATION 6.00				STATION 6.00			
VERTICAL	DT	HORIZ	Y/D = .62	VERTICAL	DT	HORIZ	Y/D = .64	VERTICAL	DT	HORIZ	Y/D = 0.00	VERTICAL	DT	HORIZ	Y/D = 0.00
Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW	
.974	.032	.430	.001	.934	.062	.473	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.881	.073	.387	.027	.881	.109	.430	.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.829	.145	.344	.034	.829	.088	.387	.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.776	.165	.301	.055	.776	.236	.344	.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.723	.206	.258	.054	.723	.249	.301	.028	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.670	.251	.215	.087	.670	.174	.258	.057	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.617	.314	.172	.191	.617	.226	.215	.078	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.564	.291	.129	.145	.564	.168	.172	.093	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.511	.265	.086	.199	.511	.156	.129	.198	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.458	.205	.043	.238	.458	.107	.065	.154	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.405	.164	0.000	.265	.405	.122	.043	.210	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.352	.121	-.043	.166	.352	.092	0.000	.199	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.299	.103	-.086	.211	.299	.081	-.043	.226	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.247	.068	-.129	.165	.247	.068	-.086	.254	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.194	.046	-.172	.143	.194	.055	-.129	.217	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.141	.031	-.215	.138	.141	.052	-.172	.149	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.088	.042	-.258	.056	.088	.026	-.215	.171	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.035	.031	-.301	.051	.035	.034	-.258	.136	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.344	.036	0.000	0.000	-.301	.105	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.387	.019	0.000	0.000	-.344	.058	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.430	.004	0.000	0.000	-.387	.063	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.473	0.000	0.000	0.000	-.430	.040	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.473	.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.515	.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	1.943210	MEAN	1.940451	MEAN	1.947479	MEAN	1.947479	MEAN	1.923364	MEAN	1.923364	MEAN	1.923364	MEAN	2.027968
VARIANCE A	.004168	VARIANCE A	.005116	VARIANCE A	.010473	VARIANCE A	.012531	VARIANCE A	.018668	VARIANCE A	.036060	VARIANCE A	.045516	VARIANCE A	.078048
VARIANCE H	.003565	VARIANCE H	.002774	VARIANCE H	.010963	VARIANCE H	.010564	VARIANCE H	.013924	VARIANCE H	.022649	VARIANCE H	.044318	VARIANCE H	.056365
AVERAGE T	1.1418	AVERAGE T	1.1038	AVERAGE T	1.1171	AVERAGE T	1.1032	AVERAGE T	0.0000	AVERAGE T	0.0000	AVERAGE T	0.0000	AVERAGE T	0.0000

TABLE 8 - continued

LARGE NOZZLE DIAMETER = 1.862CM											
JET STRENGTH = 3.32				FROUDE NO. = 40.80				STATION 1.00			
STATION 2.00				STATION 3.00				STATION 4.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.746	0.00	.129	0.000	.415	0.000	.215	0.000	.426	0.000	.258	0.000
.725	.053	.118	.027	.894	.017	.194	.015	.873	.075	.237	.019
.704	.084	.108	.051	.873	.022	.172	.026	.820	.128	.215	.057
.683	.108	.097	.084	.852	.131	.151	.048	.767	.212	.194	.123
.661	.441	.086	.182	.831	.144	.129	.281	.714	.091	.172	.152
.640	1.004	.075	.337	.810	.201	.108	.821	.661	1.181	.151	.195
.619	1.925	.065	1.082	.788	.337	.086	.860	.608	1.148	.129	.314
.598	1.717	.054	2.347	.767	.354	.065	1.043	.556	1.181	.108	.669
.577	3.474	.043	1.492	.746	.404	.043	1.322	.503	1.186	.086	.769
.556	4.636	.032	2.746	.725	.400	.022	1.498	.450	1.226	.065	.776
.534	5.670	.022	3.394	.704	.426	0.000	2.641	.397	.043	.043	.986
.513	4.984	.011	4.884	.683	1.114	-.022	1.877	.344	.314	.022	1.148
.492	3.345	0.000	5.510	.661	1.503	-.043	1.809	.291	.134	0.000	1.211
.471	2.847	-.011	4.760	.640	1.704	-.065	1.250	.238	.117	-.022	.966
.450	1.713	-.022	3.562	.619	2.184	-.086	.684	.185	.033	-.043	.847
.429	.741	-.032	2.853	.598	2.810	-.108	.442	0.000	0.000	-.065	1.153
.407	.552	-.043	1.870	.577	1.901	-.129	.246	0.000	0.000	-.086	.760
.386	.256	-.054	1.060	.556	2.098	-.151	.224	0.000	0.000	-.108	.654
.365	.141	-.065	.754	.534	2.508	-.172	.054	0.000	0.000	-.129	.672
.344	.049	-.075	.377	.513	2.377	-.194	.054	0.000	0.000	-.151	.494
.323	.004	-.086	.191	.492	2.154	-.215	0.000	0.000	0.000	-.172	.353
.000	0.000	-.097	.071	.471	1.739	0.000	0.000	0.000	0.000	-.194	.249
.000	0.000	-.108	.004	.450	1.783	0.000	0.000	0.000	0.000	-.215	.158
.000	0.000	-.118	.031	.429	1.250	0.000	0.000	0.000	0.000	-.237	.084
.000	0.000	0.000	0.000	.407	1.202	0.000	0.000	0.000	0.000	-.258	.006
.000	0.000	0.000	0.000	.386	.918	0.000	0.000	0.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.365	.603	0.000	0.000	0.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.344	.485	0.000	0.000	0.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.323	.385	0.000	0.000	0.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.302	.236	0.000	0.000	0.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.280	.092	0.000	0.000	0.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.259	.009	0.000	0.000	0.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	.238	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.441875	1.932142	.420903	1.940256	.422861	1.968056	.400361	1.922775	.400361	1.922775	.400361	1.922775
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.003089	.004331	.011331	.015454	.014112	.033027	.028917	.067290	.028917	.067290	.028917	.067290
VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H
.002322	.003263	.008728	.009867	.016941	.030911	.024250	.056241	.024250	.056241	.024250	.056241
AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T
1.6164	1.5784	.9971	.7523	.5344	.5125	.3306	.2825	.3306	.2825	.3306	.2825

LARGE NOZZLE DIAMETER = 1.862CM											
JET STRENGTH = 3.32				FROUDE NO. = 40.80				STATION 5.00			
STATION 6.00				STATION 7.00				STATION 8.00			
VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT	VERTICAL	HORIZ	Y/D	DT
Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT	Y/D	DT	Z/HW	DT
.926	.183	.387	0.000	.430	0.000	0.000	0.000	.516	0.000	0.000	0.000
.873	.240	.344	.039	.387	.021	0.000	0.000	.473	.046	0.000	0.000
.820	.317	.301	.048	.344	.060	0.000	0.000	.430	.086	0.000	0.000
.767	.457	.258	.083	.301	.107	0.000	0.000	.387	.047	0.000	0.000
.714	.388	.215	.072	.258	.141	0.000	0.000	.344	.064	0.000	0.000
.661	.365	.172	.233	.215	.227	0.000	0.000	.301	.096	0.000	0.000
.608	.269	.129	.484	.172	.347	0.000	0.000	.258	.176	0.000	0.000
.556	.288	.086	.368	.129	.426	0.000	0.000	.215	.194	0.000	0.000
.503	.337	.043	.361	.086	.429	0.000	0.000	.172	.310	0.000	0.000
.450	.175	0.000	.378	.043	.391	0.000	0.000	.129	.305	0.000	0.000
.397	.119	-.043	.438	0.000	.363	0.000	0.000	.086	.321	0.000	0.000
.344	.237	-.086	.418	0.000	.404	0.000	0.000	.043	.346	0.000	0.000
.291	.212	-.129	.381	0.000	.351	0.000	0.000	0.000	.313	0.000	0.000
.238	.128	-.172	.173	0.000	.320	0.000	0.000	-.043	.286	0.000	0.000
.185	.126	-.215	.087	0.000	.297	0.000	0.000	-.086	.318	0.000	0.000
.000	0.000	-.258	.044	0.000	.215	.319	0.000	-.129	.275	0.000	0.000
.000	0.000	-.301	.019	0.000	.258	.230	0.000	-.172	.233	0.000	0.000
.000	0.000	-.344	.001	0.000	.301	.046	0.000	-.215	.263	0.000	0.000
.000	0.000	0.000	0.000	0.000	.344	.052	0.000	-.258	.171	0.000	0.000
.000	0.000	0.000	0.000	0.000	.387	.038	0.000	-.301	.165	0.000	0.000
.000	0.000	0.000	0.000	0.000	.430	.017	0.000	-.344	.113	0.000	0.000
.000	0.000	0.000	0.000	0.000	.473	.061	0.000	-.387	.093	0.000	0.000
.000	0.000	0.000	0.000	0.000	.516	.040	0.000	-.430	.045	0.000	0.000
.000	0.000	0.000	0.000	0.000	.559	.000	0.000	-.473	.020	0.000	0.000
.000	0.000	0.000	0.000	0.000	.602	.000	0.000	-.516	.002	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.774747	1.914264	.000000	1.946649	.000000	1.946624	.000000	.000000	.000000	.000000	.000000	.000000
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.077167	.062177	.000000	.101211	.000000	.158505	.000000	.000000	.000000	.000000	.000000	.000000
VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H
.026162	.042211	.000000	.127152	.000000	.164850	.000000	.000000	.000000	.000000	.000000	.000000
AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T	AVERAGE T
.2573	.2018	0.0000	.2108	0.0000	.1716	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

TABLE 9 - DIFFUSION DATA - RIVERBED ROUGHNESS - SALT

CONCENTRATION DISTRIBUTIONS
INJECTION CONCENTRATION = 2500 MG. PER LITER

VARIANCE A USES BASIC DEFINITION
VARIANCE B USES REFLECTION PRINCIPLE

TABLE 9 - continued

SMALL NOZZLE DIAMETER = .468CM											
JET STRENGTH = 1.00				FROUDE NO. = INF.				STATION 1.50			
VERTICAL	STATION .50	HORIZ Y/D = .51	Y/D	VERTICAL	STATION 1.00	HORIZ Y/D = .51	Y/D	VERTICAL	STATION 1.50	HORIZ Y/D = .51	Y/D
C	Z/HW	C	C	C	Z/HW	C	C	C	Z/HW	C	C
.652	0.000	.086	0.000	.737	0.000	.129	0.000	.885	.101	.215	0.000
.631	1.189	.075	1.562	.715	.086	.108	.209	.832	.101	.194	0.000
.610	5.740	.065	1.825	.694	.100	.086	.710	.779	.202	.172	.306
.588	6.909	.054	3.225	.673	.108	.065	1.816	.726	.101	.151	.215
.567	11.152	.043	3.306	.652	1.415	.043	3.340	.673	.721	.129	.455
.546	26.200	.032	4.948	.631	3.666	.022	7.166	.650	1.009	.108	.588
.525	18.594	.022	1.744	.610	3.366	0.000	8.559	.567	1.341	.086	1.151
.504	12.362	.011	31.300	.588	3.945	-.022	4.196	.514	2.170	.065	2.426
.483	6.540	0.000	17.447	.567	4.095	-.043	6.242	.461	4.110	.043	3.400
.461	6.191	-.011	4.126	.546	6.468	-.065	1.327	.408	3.843	.022	2.070
.440	4.859	-.022	7.605	.525	12.500	-.086	8.350	.356	2.610	0.000	1.888
.419	2.522	-.032	11.215	.504	7.590	-.108	10.250	.303	1.673	-.022	1.846
.398	.943	-.043	4.908	.483	4.931	-.129	5.074	.250	1.233	-.043	2.186
.377	.185	-.054	2.312	.461	6.647	-.151	5.198	.197	.728	-.065	2.567
.356	.021	-.065	.631	.440	4.245	-.172	4.321	.144	.346	-.086	1.292
0.000	0.000	-.075	.081	.419	1.473	-.194	2.618	.091	.159	-.108	1.110
0.000	0.000	0.000	0.000	.398	2.204	-.215	1.745	0.000	0.000	-.129	.273
0.000	0.000	0.000	0.000	.377	1.479	-.237	1.503	0.000	0.000	-.151	.075
0.000	0.000	0.000	0.000	.356	.729	-.258	.981	0.000	0.000	-.172	.017
0.000	0.000	0.000	0.000	.334	.472	-.280	.585	0.000	0.000	-.194	.017
0.000	0.000	0.000	0.000	.313	.193	-.301	.522	0.000	0.000	-.215	0.000
0.000	0.000	0.000	0.000	.292	.043	-.323	.418	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.344	.021	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.446105	1.931387	.450343	2.090476	.537967	1.929484	.507727	1.877112	.446105	1.931387	.450343	2.090476
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.002057	.002646	.004555	.025460	.015893	.016780	.021647	.018273	.002057	.002646	.004555	.025460
VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B
.000991	.000850	.001788	.019000	.009725	.009100	.021777	.012954	.000991	.000850	.001788	.019000
AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C
6.8937	7.3009	3.0845	3.6959	1.2781	1.0658	1.9028	1.3303	6.8937	7.3009	3.0845	3.6959

SMALL NOZZLE DIAMETER = .468CM											
JET STRENGTH = 1.00				FROUDE NO. = INF.				STATION 0.00			
VERTICAL	STATION 3.00	HORIZ Y/D = .51	Y/D	VERTICAL	STATION 4.00	HORIZ Y/D = .51	Y/D	VERTICAL	STATION 0.00	HORIZ Y/D = 0.00	Y/D
C	Z/HW	C	C	C	Z/HW	C	C	C	Z/HW	C	C
.938	.152	.430	0.000	.938	.090	.516	0.000	0.000	0.000	0.000	0.000
.885	.300	.387	.023	.885	.226	.473	.020	0.000	0.000	0.000	0.000
.832	.434	.344	.063	.832	.234	.430	.044	0.000	0.000	0.000	0.000
.779	.522	.301	.081	.779	.350	.387	.148	0.000	0.000	0.000	0.000
.726	.739	.258	.412	.726	.431	.344	.192	0.000	0.000	0.000	0.000
.673	.794	.215	.307	.673	.480	.301	.160	0.000	0.000	0.000	0.000
.620	1.007	.172	.174	.620	1.020	.258	.332	0.000	0.000	0.000	0.000
.567	.582	.129	.289	.567	.835	.215	.440	0.000	0.000	0.000	0.000
.514	.847	.086	.561	.514	.831	.172	.688	0.000	0.000	0.000	0.000
.461	.905	.043	1.230	.461	1.012	.129	.756	0.000	0.000	0.000	0.000
.408	.845	0.000	1.225	.408	.876	.086	.876	0.000	0.000	0.000	0.000
.356	1.450	-.043	.644	.356	.942	.043	.940	0.000	0.000	0.000	0.000
.303	.643	-.086	.742	.303	.642	0.000	.744	0.000	0.000	0.000	0.000
.250	.457	-.129	.529	.250	.415	-.043	.658	0.000	0.000	0.000	0.000
.197	.743	-.172	.402	.197	.304	-.086	.724	0.000	0.000	0.000	0.000
.144	.443	-.215	.289	.144	.148	-.129	.684	0.000	0.000	0.000	0.000
.091	.300	-.258	.194	.091	.136	-.172	.528	0.000	0.000	0.000	0.000
0.000	0.000	-.301	.118	0.000	0.000	-.215	.264	0.000	0.000	0.000	0.000
0.000	0.000	-.344	.095	0.000	0.000	-.258	.244	0.000	0.000	0.000	0.000
0.000	0.000	-.387	.054	0.000	0.000	-.301	.132	0.000	0.000	0.000	0.000
0.000	0.000	-.430	.065	0.000	0.000	-.344	.072	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.387	.022	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.430	.008	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.483436	1.947458	.450343	2.090476	.537967	1.929484	.507727	1.877112	.446105	1.931387	.450343	2.090476
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.040135	.000545	.000445	.010344	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B
.023013	.000442	.000541	.004450	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C
.6620	.3568	.5748	.3768	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

TABLE 9 - continued

SMALL NOZZLE DIAMETER = .468CM											
JET STRENGTH = 2.84						FROUDE NO. = INF.					
STATION 1.00			STATION 2.00			STATION 3.00			STATION 4.00		
VERTICAL	HORIZ	Y/D = .51	VERTICAL	HORIZ	Y/D = .51	VERTICAL	HORIZ	Y/D = .51	VERTICAL	HORIZ	Y/D = .51
Y/D	C	Z/HW	Y/D	C	Z/HW	Y/D	C	Z/HW	Y/D	C	Z/HW
.694	0.000	.174	0.000	.685	0.000	.684	1.275	.440	.625	.938	.588
.673	3.671	.118	.694	.651	.247	.685	1.443	.387	.176	.885	.701
.652	10.882	.108	.659	.779	.880	.675	1.045	.344	.252	.832	1.990
.631	7.428	.097	1.071	.776	1.503	.665	.779	3.199	.301	.429	.779
.610	4.152	.086	1.853	.673	4.057	.655	.776	2.551	.268	2.744	.726
.588	10.226	.075	.494	.620	7.792	.645	.510	.673	2.614	.215	2.214
.567	20.483	.065	12.312	.567	6.912	.635	.695	.620	4.161	.172	1.538
.546	27.882	.054	7.824	.514	7.408	.625	1.252	.587	6.670	.129	2.496
.525	45.100	.043	11.674	.461	12.300	.615	3.454	.574	4.621	.086	3.555
.504	27.794	.032	20.794	.408	8.687	.605	7.070	.561	3.596	.043	4.413
.483	19.185	.022	21.206	.355	9.445	.595	12.100	.548	3.638	0.000	6.001
.461	14.509	.011	20.876	.303	1.073	.585	11.752	.535	3.701	-.043	6.430
.440	17.568	0.000	32.365	.250	3.435	.575	6.560	.523	2.676	-.086	4.211
.419	12.193	-.011	44.100	.197	.794	.565	7.325	.510	2.237	-.129	5.951
.398	17.350	-.022	30.141	.144	.258	.555	8.183	.497	2.948	-.172	4.867
.377	7.648	-.032	20.382	0.000	0.000	.545	6.398	.484	1.986	-.215	4.463
.356	6.249	-.043	12.476	0.000	0.000	.535	5.818	.471	.836	-.258	3.707
.334	.044	-.054	10.088	0.000	0.000	.525	5.146	0.000	0.000	-.301	2.622
.313	0.000	-.065	7.371	0.000	0.000	.515	2.017	0.000	0.000	-.344	.958
.292	.044	-.075	1.647	0.000	0.000	.505	1.368	0.000	0.000	-.387	.454
.271	0.000	-.086	2.512	0.000	0.000	.495	1.646	0.000	0.000	-.430	.101
0.000	0.000	-.097	1.606	0.000	0.000	.485	.394	0.000	0.000	0.000	0.000
0.000	0.000	-.108	2.429	0.000	0.000	.475	.023	0.000	0.000	0.000	0.000
0.000	0.000	-.118	.124	0.000	0.000	.465	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.129	0.000	0.000	0.000	.455	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN		MEAN	MEAN		MEAN	MEAN		MEAN	MEAN	
.467344	1.939461		.488651	1.952494		.465651	2.036931		.461051	1.990028	
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A	
.004732	.005461		.014996	.020744		.038818	.099454		.035063	.079733	
VARIANCE H	VARIANCE H		VARIANCE H	VARIANCE H		VARIANCE H	VARIANCE H		VARIANCE H	VARIANCE H	
.001925	.002570		.011133	.013104		.020729	.088397		.034561	.063168	
AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C	
11.8048	10.7586		4.3461	3.6242		2.8941	2.7413		2.2955	1.6286	

SMALL NOZZLE DIAMETER = .468CM											
JET STRENGTH = 2.84						FROUDE NO. = INF.					
STATION 6.00			STATION 0.00			STATION 0.00			STATION 0.00		
VERTICAL	HORIZ	Y/D = .51	VERTICAL	HORIZ	Y/D = 0.00	VERTICAL	HORIZ	Y/D = 0.00	VERTICAL	HORIZ	Y/D = 0.00
Y/D	C	Z/HW	Y/D	C	Z/HW	Y/D	C	Z/HW	Y/D	C	Z/HW
.938	1.419	.688	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.885	1.890	.602	.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.832	1.688	.516	.456	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.779	1.487	.430	1.069	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.726	1.960	.344	.415	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.673	2.570	.258	1.592	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.620	2.209	.172	1.028	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.567	2.441	.086	2.255	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.514	2.511	0.000	2.288	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.461	2.125	-.086	2.570	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.408	2.217	-.172	2.106	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.356	2.209	-.258	1.252	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.303	2.083	-.344	1.219	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.250	2.570	-.430	.589	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.197	1.974	-.516	.323	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.144	1.789	-.602	.182	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.091	1.248	-.688	.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.038	.705	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN		MEAN	MEAN		MEAN	MEAN		MEAN	MEAN	
.474283	1.941083		0.000000	0.000000		0.000000	0.000000		0.000000	0.000000	
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A	
.054751	.233771		0.000000	0.000000		0.000000	0.000000		0.000000	0.000000	
VARIANCE H	VARIANCE H		VARIANCE H	VARIANCE H		VARIANCE H	VARIANCE H		VARIANCE H	VARIANCE H	
.064454	.202387		0.000000	0.000000		0.000000	0.000000		0.000000	0.000000	
AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C	
1.9508	1.6236		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	

TABLE 9 - continued

SMALL NOZZLE DIAMETER = .408CM											
JET STRENGTH = 4.69				FROUDE NO. = INF.							
STATION 1.00				STATION 2.00				STATION 3.00			
VERTICAL	HORIZ	Y/D = .51		VERTICAL	HORIZ	Y/D = .51		VERTICAL	HORIZ	Y/D = .51	
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.779	0.000	.129	0.000	.885	0.000	.215	0.000	.938	.268	.387	0.000
.758	.404	.118	.082	.832	3.054	.184	.368	.885	.304	.344	.148
.737	3.368	.108	.286	.779	.811	.172	.177	.832	1.503	.301	.376
.715	3.656	.097	.858	.726	.937	.151	2.517	.779	4.388	.258	.497
.694	3.163	.086	3.389	.673	7.493	.129	3.477	.726	4.838	.215	.766
.673	5.687	.075	13.965	.620	15.422	.104	4.444	.673	3.726	.172	1.546
.652	11.050	.065	15.803	.567	17.714	.086	5.031	.620	8.503	.129	6.211
.631	11.748	.054	18.702	.514	22.600	.065	7.117	.567	13.300	.086	4.033
.610	9.243	.043	24.010	.461	14.171	.043	16.300	.514	12.353	.043	5.539
.588	25.386	.032	33.320	.408	11.431	.022	23.600	.461	7.371	0.000	13.000
.567	46.007	.022	35.475	.356	7.574	0.000	13.334	.408	11.797	.043	6.695
.546	34.106	.011	46.101	.303	5.486	-.022	12.107	.356	13.032	-.086	7.515
.525	54.316	0.000	66.600	.250	2.280	-.043	14.356	.303	10.232	-.129	3.495
.504	63.465	-.011	54.350	.197	1.385	-.065	12.189	.250	8.174	-.172	4.772
.483	68.800	-.022	51.614	.144	.081	-.086	8.262	.197	5.126	-.215	2.729
.461	49.047	-.032	37.363	0.000	0.000	-.108	4.213	.144	2.409	-.258	1.519
.440	45.062	-.043	33.361	0.000	0.000	-.129	2.781	.091	1.503	-.301	.753
.419	28.713	-.054	16.252	0.000	0.000	-.151	1.841	0.000	0.000	-.344	.323
.398	16.349	-.065	8.371	0.000	0.000	-.172	1.104	0.000	0.000	-.387	.094
.377	18.896	-.075	7.391	0.000	0.000	-.194	.368	0.000	0.000	-.430	.013
.356	8.750	-.086	6.370	0.000	0.000	-.215	.205	0.000	0.000	-.473	0.000
.334	4.026	-.097	8.167	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.313	1.890	-.108	4.737	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.292	.288	-.118	2.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.271	.041	-.129	.572	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.140	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.151	.082	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.468881		1.943858		.462499		1.939526		.512027		1.984476	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.005225		.006167		.013987		.018123		.026889		.055786	
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B	
.003709		.003734		.009719		.008970		.026209		.023564	
AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C	
20.9464		18.1378		7.4492		6.4079		6.4017		2.8584	

SMALL NOZZLE DIAMETER = .408CM											
JET STRENGTH = 4.69				FROUDE NO. = INF.							
STATION 6.00				STATION 8.00				STATION 0.00			
VERTICAL	HORIZ	Y/D = .51		VERTICAL	HORIZ	Y/D = .51		VERTICAL	HORIZ	Y/D = 0.00	
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.938	1.017	.516	0.000	.938	1.429	.774	0.000	0.000	0.000	0.000	0.000
.885	1.850	.473	.091	.885	2.670	.688	.035	0.000	0.000	0.000	0.000
.832	2.556	.430	.182	.832	2.425	.602	.135	0.000	0.000	0.000	0.000
.779	2.904	.387	.364	.779	1.837	.516	.164	0.000	0.000	0.000	0.000
.726	2.418	.344	.356	.726	2.082	.430	.304	0.000	0.000	0.000	0.000
.673	3.096	.301	.588	.673	2.327	.344	.515	0.000	0.000	0.000	0.000
.620	2.510	.258	.803	.620	1.821	.258	1.491	0.000	0.000	0.000	0.000
.567	3.105	.215	2.468	.567	1.633	.172	2.117	0.000	0.000	0.000	0.000
.514	3.820	.172	1.507	.514	2.278	.086	2.053	0.000	0.000	0.000	0.000
.461	1.970	.129	3.900	.461	.898	0.000	3.240	0.000	0.000	0.000	0.000
.408	1.667	.086	1.966	.408	2.368	-.086	2.585	0.000	0.000	0.000	0.000
.356	2.492	.043	2.559	.356	1.796	-.172	1.608	0.000	0.000	0.000	0.000
.303	3.504	0.000	3.503	.303	2.637	-.258	1.170	0.000	0.000	0.000	0.000
.250	2.223	-.043	3.552	.250	.914	-.344	.725	0.000	0.000	0.000	0.000
.197	1.143	-.086	3.445	.197	1.600	-.430	.251	0.000	0.000	0.000	0.000
.144	1.145	-.129	2.968	.144	2.082	-.516	.310	0.000	0.000	0.000	0.000
.091	2.418	-.172	2.219	.091	1.086	-.602	.333	0.000	0.000	0.000	0.000
.038	.474	-.215	1.639	0.000	0.000	-.688	.123	0.000	0.000	0.000	0.000
0.000	0.000	-.258	1.259	0.000	0.000	-.774	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.301	.803	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.344	.770	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.387	.497	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.430	.397	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.473	.232	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.516	.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.559	.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.462499		1.945667		.434000		1.957893		0.000000		0.000000	
VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A		VARIANCE A	
.053387		.126644		.057390		.205664		0.000000		0.000000	
VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B		VARIANCE B	
.043178		.089407		.052355		.123999		0.000000		0.000000	
AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C		AVERAGE C	
2.2688		1.3417		1.8756		.9031		0.0000		0.0000	

TABLE 9 - continued

SMALL NOZZLE DIAMETER = .468CM												
JET STRENGTH = 8.19						FROUDE NO. = INF.						
STATION 1.00			STATION 2.00			STATION 3.00			STATION 4.00			
VERTICAL	HORIZ	Y/D = .4H	VERTICAL	HORIZ	Y/D = .51	VERTICAL	HORIZ	Y/D = .51	VERTICAL	HORIZ	Y/D = .51	
Y/D	C	Z/HW	Y/D	C	Z/HW	Y/D	C	Z/HW	Y/D	C	Z/HW	
.694	0.000	.129	0.000	.885	0.000	.938	0.000	.344	.938	2.159	.430	0.000
.673	.643	.118	.080	.832	1.906	.194	1.525	.885	.885	2.541	.387	2.324
.652	1.616	.108	.080	.779	3.906	.172	2.118	.832	.832	2.508	.344	.313
.631	7.620	.097	1.359	.726	6.609	.151	11.269	.779	.779	6.497	.301	.626
.610	5.850	.086	1.639	.673	15.222	.129	16.014	.726	.726	2.920	.258	.670
.588	17.974	.075	2.638	.620	17.425	.108	8.134	.673	.673	8.492	.215	1.408
.567	57.805	.065	5.755	.567	41.660	.086	26.435	.620	.620	13.777	.172	10.458
.546	74.276	.054	24.301	.514	69.700	.065	30.502	.567	.567	27.734	.129	5.139
.525	86.361	.043	54.453	.461	49.056	.043	24.232	.514	.514	24.800	.086	8.737
.504	96.213	.032	71.384	.408	25.436	.022	45.669	.461	.461	26.836	.043	14.100
.483	125.000	.022	107.035	.356	20.229	0.000	57.700	.408	.408	18.796	.000	12.290
.461	76.893	.011	147.803	.303	10.315	-.022	49.312	.356	.356	14.889	-.043	12.268
.440	50.493	0.000	151.800	.250	4.407	-.043	33.124	.303	.303	8.421	-.086	9.430
.419	27.786	-.011	103.278	.197	1.102	-.065	26.351	.250	.250	7.568	-.129	4.581
.398	27.678	-.022	113.750	.144	.801	-.086	19.411	.197	.197	8.578	-.172	2.748
.377	16.395	-.032	63.390	.091	.200	-.108	15.106	.144	.144	7.321	-.215	1.743
.356	6.696	-.043	35.812	0.000	0.000	-.129	12.963	.091	.091	3.391	-.258	.715
.334	4.002	-.054	12.470	0.000	0.000	-.151	7.456	.000	.000	0.000	-.301	.961
.313	2.848	-.065	10.712	0.000	0.000	-.172	5.188	0.000	0.000	0.000	-.344	.603
.292	1.155	-.075	9.752	0.000	0.000	-.194	2.965	0.000	0.000	0.000	-.387	.022
.271	.154	-.086	5.495	0.000	0.000	-.215	.867	0.000	0.000	0.000	-.430	0.000
0.000	0.000	-.097	7.354	0.000	0.000	-.237	.624	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.108	1.759	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.118	.080	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN			MEAN			MEAN			MEAN			
.478401			1.936895			.466420			.509305			
VARIANCE A			VARIANCE A			VARIANCE A			VARIANCE A			
.002992			.003426			.012371			.033569			
VARIANCE B			VARIANCE B			VARIANCE B			VARIANCE B			
.001924			.002639			.005553			.015986			
AVERAGE C			AVERAGE C			AVERAGE C			AVERAGE C			
32.7271			39.0991			16.2796			10.4274			

SMALL NOZZLE DIAMETER = .468CM											
JET STRENGTH = 8.19						FROUDE NO. = INF.					
STATION 5.00			STATION 7.00			STATION 9.00			STATION 0.00		
VERTICAL	HORIZ	Y/D = .51	VERTICAL	HORIZ	Y/D = .51	VERTICAL	HORIZ	Y/D = .51	VERTICAL	HORIZ	Y/D = 0.00
Y/D	C	Z/HW	Y/D	C	Z/HW	Y/D	C	Z/HW	Y/D	C	Z/HW
.938	.787	.430	0.000	.938	1.489	.645	0.000	.938	1.774	0.000	0.000
.885	2.900	.387	1.467	.885	4.114	.602	.193	.885	4.520	.688	0.000
.832	4.842	.344	.536	.832	3.324	.559	.378	.832	1.907	.602	0.000
.779	5.497	.301	1.228	.779	5.307	.516	.546	.779	1.845	.516	0.000
.726	6.202	.258	1.863	.726	5.307	.473	.705	.726	2.535	.430	0.000
.673	5.137	.215	4.014	.673	5.603	.430	.890	.673	1.504	.344	0.000
.620	11.700	.172	6.964	.620	6.294	.387	.772	.620	3.690	.258	0.000
.567	6.825	.129	6.816	.567	6.821	.344	1.184	.567	1.303	.172	0.000
.514	9.204	.086	9.157	.514	6.632	.301	1.754	.514	1.675	.086	0.000
.461	7.833	.043	11.407	.461	8.178	.258	1.737	.461	2.481	0.000	0.000
.408	9.185	0.000	13.500	.408	9.750	.215	4.558	.408	1.946	-.086	0.000
.356	10.766	-.043	10.758	.356	6.196	.172	2.795	.356	.349	-.172	0.000
.303	6.407	-.086	4.264	.303	3.571	.129	5.414	.303	2.830	-.258	0.000
.250	5.776	-.129	6.272	.250	4.632	.086	6.420	.250	3.466	-.344	0.000
.197	3.146	-.172	3.470	.197	6.204	.043	5.162	.197	2.489	-.430	0.000
.144	3.392	-.215	2.102	.144	4.904	0.000	6.245	.144	2.636	-.516	0.000
.091	1.983	-.258	.643	.091	.798	-.043	4.507	.091	1.551	-.602	0.000
0.000	0.000	-.301	.560	0.000	0.000	-.086	6.958	0.000	0.000	-.688	0.000
0.000	0.000	-.344	.206	0.000	0.000	-.129	5.204	0.000	0.000	-.774	0.000
0.000	0.000	-.387	.046	0.000	0.000	-.172	4.381	0.000	0.000	-.860	0.000
0.000	0.000	-.430	.074	0.000	0.000	-.215	2.610	0.000	0.000	-.946	0.000
0.000	0.000	-.473	0.000	0.000	0.000	-.258	2.191	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.301	1.414	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.344	.814	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.387	1.175	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.430	.613	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.473	.361	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.516	.227	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.559	.104	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.602	.025	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.645	0.000	0.000	0.000	0.000	0.000
MEAN			MEAN			MEAN			MEAN		
.466548			1.994161			.468541			2.001160		
VARIANCE A			VARIANCE A			VARIANCE A			VARIANCE A		
.076415			.004223			.042186			.218614		
VARIANCE B			VARIANCE B			VARIANCE B			VARIANCE B		
.024477			.044402			.032198			.152160		
AVERAGE C			AVERAGE C			AVERAGE C			AVERAGE C		
6.0052			4.0984			5.2424			1.5477		

TABLE 9 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM											
STATION 1.00				STATION 2.00				STATION 3.00			
VERTICAL	C	HORIZ	Y/D = .57	VERTICAL	C	HORIZ	Y/D = .57	VERTICAL	C	HORIZ	Y/D = .57
Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW	
.800	0.000	.129	0.000	.938	.452	.258	0.000	.938	1.258	.387	0.000
.774	2.288	.118	.787	.885	1.174	.237	.405	.885	2.008	.384	.462
.758	4.657	.108	1.836	.832	3.341	.215	.946	.832	3.347	.301	.778
.737	6.618	.097	3.934	.779	4.425	.194	1.937	.779	6.248	.258	.676
.715	12.827	.086	6.950	.726	7.225	.172	3.875	.726	7.262	.215	1.085
.694	15.196	.075	9.573	.671	12.192	.151	5.992	.671	9.480	.172	2.744
.673	25.816	.065	23.604	.620	13.275	.129	9.732	.620	11.786	.129	4.772
.652	13.709	.054	17.304	.567	13.407	.108	9.236	.567	9.717	.086	5.693
.631	25.440	.043	23.473	.514	11.830	.086	12.886	.514	10.467	.043	8.826
.610	13.954	.032	74.259	.461	20.500	.065	9.642	.461	12.800	0.000	15.400
.588	52.368	.022	40.913	.408	18.333	.043	13.316	.408	9.534	-.043	10.137
.567	61.600	.011	44.323	.356	15.804	.022	20.500	.356	6.694	-.086	5.816
.546	33.741	0.000	55.600	.303	9.844	0.000	15.274	.303	6.207	-.129	7.086
.525	41.012	-.011	50.486	.250	3.883	-.022	14.373	.250	5.497	-.172	5.345
.504	21.323	-.022	52.453	.197	3.387	-.043	16.130	.197	3.895	-.215	2.806
.483	26.512	-.032	24.898	.144	1.761	-.065	12.075	.144	2.718	-.258	1.126
.461	24.182	-.043	27.431	.091	.587	-.086	8.966	.091	2.029	-.301	1.618
.440	13.480	-.054	19.145	0.000	0.000	-.108	6.668	0.000	0.000	-.344	.553
.419	7.026	-.065	11.540	0.000	0.000	-.129	5.001	0.000	0.000	-.387	.102
.398	2.369	-.075	10.228	0.000	0.000	-.151	5.271	0.000	0.000	-.430	.041
.377	.408	-.086	12.195	0.000	0.000	-.172	6.843	0.000	0.000	-.473	0.000
.356	.408	-.097	6.819	0.000	0.000	-.194	2.748	0.000	0.000	0.000	0.000
0.000	0.000	-.108	4.983	0.000	0.000	-.215	1.487	0.000	0.000	0.000	0.000
0.000	0.000	-.118	1.705	0.000	0.000	-.237	.315	0.000	0.000	0.000	0.000
0.000	0.000	-.129	.131	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.404306		1.942553		.473365		1.933116		.456834		1.975147	
VARIANCE A		.007228		.023506		.03378d		.032962		.061499	
VARIANCE B		.002914		.014930		.022147		.029280		.026612	
AVERAGE C		19.2030		8.3482		7.6537		6.5557		3.5984	

MEDIUM NOZZLE DIAMETER = 1.094CM											
STATION 5.00				STATION 7.00				STATION 9.00			
VERTICAL	C	HORIZ	Y/D = .57	VERTICAL	C	HORIZ	Y/D = .57	VERTICAL	C	HORIZ	Y/D = .57
Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW	
.938	3.593	.516	0.000	.938	3.086	.684	0.000	0.000	0.000	0.000	0.000
.885	3.795	.473	.102	.885	1.851	.602	.142	0.000	0.000	0.000	0.000
.832	5.537	.430	.387	.832	2.722	.516	.407	0.000	0.000	0.000	0.000
.779	5.724	.387	.611	.779	1.408	.430	.712	0.000	0.000	0.000	0.000
.726	5.599	.344	.224	.726	2.437	.344	.651	0.000	0.000	0.000	0.000
.673	7.170	.301	1.670	.673	3.465	.258	.732	0.000	0.000	0.000	0.000
.620	7.030	.258	1.324	.620	2.927	.172	1.709	0.000	0.000	0.000	0.000
.567	7.154	.215	3.789	.567	3.798	.086	2.929	0.000	0.000	0.000	0.000
.514	5.459	.172	5.622	.514	3.766	0.000	3.255	0.000	0.000	0.000	0.000
.461	5.941	.129	4.889	.461	4.130	-.086	2.470	0.000	0.000	0.000	0.000
.408	5.568	.086	7.170	.408	3.576	-.172	4.150	0.000	0.000	0.000	0.000
.356	5.133	.043	5.092	.356	3.117	-.258	3.418	0.000	0.000	0.000	0.000
.303	4.013	0.000	5.500	.303	3.117	-.344	1.811	0.000	0.000	0.000	0.000
.250	3.919	-.043	6.518	.250	2.516	-.430	.793	0.000	0.000	0.000	0.000
.197	2.748	-.086	6.233	.197	1.962	-.516	.570	0.000	0.000	0.000	0.000
.144	2.271	-.129	5.215	.144	2.263	-.602	.163	0.000	0.000	0.000	0.000
.091	1.491	-.172	5.092	.091	1.646	-.684	.122	0.000	0.000	0.000	0.000
0.000	0.000	-.215	4.481	.038	1.447	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.258	2.954	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.301	2.037	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.344	1.222	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.387	.733	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.430	.387	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.473	.204	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.516	.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.419254		1.946259		.446108		2.074118		0.000000		0.000000	
VARIANCE A		.114469		.054388		.204599		0.000000		0.000000	
VARIANCE B		.104983		.051506		.153761		0.000000		0.000000	
AVERAGE C		2.8596		2.7375		1.4432		0.0000		0.0000	

TABLE 9 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM											
JET STRENGTH = 2.12				FROUDE NO. = INF.							
STATION 1.00			STATION 2.00			STATION 3.00			STATION 4.00		
VERTICAL	HORIZ	Y/D = .57	VERTICAL	HORIZ	Y/D = .57	VERTICAL	HORIZ	Y/D = .57	VERTICAL	HORIZ	Y/D = .57
Y/D	C	Z/HW	Y/D	C	Z/HW	Y/D	C	Z/HW	Y/D	C	Z/HW
.779	0.000	.129	0.000	.885	0.000	.258	0.000	.938	7.886	.473	0.000
.758	1.141	.118	.414	.832	.964	.237	.210	.885	5.519	.301	.328
.737	4.537	.108	1.242	.779	6.661	.215	.526	.832	13.495	.258	3.814
.715	5.917	.097	3.434	.726	19.821	.194	.946	.779	20.266	.215	14.640
.694	13.216	.086	45.550	.673	17.759	.172	4.416	.726	21.765	.172	13.245
.673	47.367	.075	11.802	.620	31.217	.151	12.016	.673	44.280	.129	12.589
.652	61.147	.065	56.730	.567	40.005	.129	11.144	.620	31.211	.086	30.386
.631	86.001	.054	21.428	.514	84.100	.108	27.127	.567	46.221	.043	35.717
.610	132.452	.043	91.427	.461	74.069	.086	33.854	.514	34.877	.000	51.300
.588	142.020	.032	111.404	.408	81.809	.065	34.005	.461	51.300	-.043	31.945
.567	174.300	.022	140.164	.356	25.037	.043	67.076	.408	34.557	-.086	15.943
.546	161.153	.011	155.440	.303	16.451	.022	36.462	.356	23.663	-.129	23.866
.525	173.185	0.000	174.400	.250	8.506	0.000	62.030	.303	19.337	-.172	7.258
.504	67.657	-.011	175.154	.197	4.475	-.022	77.800	.250	8.918	-.215	3.527
.483	93.299	-.022	123.191	.144	2.407	-.043	49.514	.197	3.664	-.258	1.476
.461	41.620	-.032	78.677	.091	1.236	-.065	30.594	.144	2.389	-.301	.410
.440	21.106	-.043	78.470	.038	.241	-.086	15.481	.091	.927	-.344	.041
.419	10.651	-.054	45.364	0.000	0.000	-.108	12.301	0.000	0.000	0.000	0.000
.398	7.693	-.065	26.502	0.000	0.000	-.129	18.814	0.000	0.000	0.000	0.000
.377	2.564	-.075	13.251	0.000	0.000	-.151	7.354	0.000	0.000	0.000	0.000
.356	1.381	-.086	9.110	0.000	0.000	-.172	1.577	0.000	0.000	0.000	0.000
0.000	0.000	-.097	6.625	0.000	0.000	-.194	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.108	2.277	0.000	0.000	-.215	.105	0.000	0.000	0.000	0.000
0.000	0.000	-.118	.414	0.000	0.000	-.237	.105	0.000	0.000	0.000	0.000
0.000	0.000	-.129	.207	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.413560	1.936402		.477400	1.922501		.431708	1.906617		.439757	1.960448	
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A	
.003444	.005162		.014040	.018790		.023057	.043910		.041276	.082140	
VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B	
.003099	.004089		.007724	.011754		.020543	.025522		.032417	.033035	
AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C	
59.6070	55.1813		21.8039	21.1497		21.7806	14.5021		13.4174	7.7975	

MEDIUM NOZZLE DIAMETER = 1.094CM											
JET STRENGTH = 2.72				FROUDE NO. = INF.							
STATION 6.00			STATION 8.00			STATION 10.00			STATION 0.00		
VERTICAL	HORIZ	Y/D = .57	VERTICAL	HORIZ	Y/D = .57	VERTICAL	HORIZ	Y/D = .57	VERTICAL	HORIZ	Y/D = 0.00
Y/D	C	Z/HW	Y/D	C	Z/HW	Y/D	C	Z/HW	Y/D	C	Z/HW
.938	4.245	.688	0.000	.938	5.407	.817	0.000	.938	2.844	.860	0.000
.885	6.933	.602	.605	.885	6.788	.731	.270	.885	4.036	.774	.209
.832	9.659	.516	1.058	.832	7.769	.645	.963	.832	8.879	.688	.959
.779	8.919	.430	1.512	.779	8.514	.559	1.964	.779	6.842	.602	1.501
.726	15.813	.344	3.930	.726	7.259	.473	3.003	.726	7.803	.516	3.086
.673	12.776	.258	13.655	.673	5.662	.387	6.815	.673	8.187	.430	4.670
.620	18.345	.172	9.674	.620	4.436	.301	4.041	.620	11.647	.344	4.170
.567	17.099	.086	16.074	.567	5.572	.215	10.289	.567	10.878	.258	4.754
.514	21.500	0.000	14.500	.514	10.790	.129	9.549	.514	8.072	.172	4.003
.461	14.216	-.046	15.116	.461	6.553	.043	14.409	.461	8.764	.086	7.464
.408	17.800	-.172	10.682	.408	7.160	-.043	13.124	.408	9.263	0.000	10.300
.356	16.943	-.258	14.713	.356	4.221	-.129	10.627	.356	12.300	-.086	4.337
.303	9.971	-.344	8.566	.303	14.400	-.215	8.163	.303	10.224	-.172	7.006
.250	11.295	-.430	3.023	.250	8.291	-.301	2.614	.250	8.572	-.258	7.298
.197	7.712	-.516	.252	.197	8.495	-.387	3.059	.197	6.801	-.344	3.566
.144	9.075	-.602	.252	.144	6.788	-.473	1.540	.144	5.842	-.430	3.656
.091	5.481	-.688	.463	.091	7.162	-.559	1.345	.091	3.613	-.516	1.501
.038	5.141	-.774	5.090	.038	3.767	-.645	.077	.038	2.345	-.602	.742
0.000	0.000	0.000	0.000	0.000	0.000	-.731	.039	0.000	0.000	-.688	.542
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.774	.334
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.860	.942
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.473045	1.947261		.495330	1.952692		.477711	1.949177		0.000000	0.000000	
VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A		VARIANCE A	VARIANCE A	
.004498	.016643		.001114	.015694		.007397	.015110		0.000000	0.000000	
VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B		VARIANCE B	VARIANCE B	
.017443	.016445		.005131	.016011		.007449	.0201975		0.000000	0.000000	
AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C		AVERAGE C	AVERAGE C	
11.8492	6.6120		7.4550	4.6592		7.6064	3.3162		0.0000	0.0000	

TABLE 9 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM											
JET STRENGTH = 4.57				FROUDE NO. = INF.				STATION 2.00			
STATION 1.00				STATION 3.00				STATION 4.00			
VERTICAL	C	HORIZ	Y/D = .57	VERTICAL	C	HORIZ	Y/D = .57	VERTICAL	C	HORIZ	Y/D = .57
Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW	
.715	0.000	.097	0.000	.938	0.000	.344	0.000	.990	5.636	.430	0.000
.694	11.088	.086	.423	.737	1.041	.301	.442	.938	8.658	.387	.249
.673	21.825	.075	2.054	.715	1.301	.258	4.434	.885	5.962	.344	2.328
.652	58.998	.065	15.229	.694	2.602	.215	49.719	.832	14.212	.301	5.404
.631	127.620	.054	28.195	.673	4.163	.172	18.645	.779	17.805	.258	7.234
.610	205.737	.043	46.406	.652	6.319	.129	49.028	.726	22.461	.215	15.548
.588	265.909	.032	148.795	.631	105.211	.086	30.482	.673	30.874	.172	10.060
.567	271.558	.022	211.771	.610	104.381	.043	68.754	.620	37.979	.129	24.766
.546	297.500	.011	266.166	.588	130.000	.000	31.440	.567	57.500	.086	31.844
.525	195.614	0.000	266.102	.567	104.422	.065	36.423	.546	44.513	.043	51.300
.504	156.491	.011	267.300	.546	65.144	.043	103.805	.525	41.165	0.000	44.399
.483	110.673	.022	177.813	.525	34.049	.022	116.293	.504	26.708	.043	47.891
.461	71.740	.032	134.183	.504	15.277	0.000	128.000	.483	21.317	.065	37.165
.440	23.641	.043	47.756	.483	4.400	.022	117.073	.461	15.437	.086	45.230
.419	17.992	.054	55.978	.461	2.882	.043	108.228	.440	15.192	.129	20.537
.398	6.667	.065	24.636	.440	1.441	.065	87.675	.419	14.375	.172	20.453
.377	4.184	.075	28.195	.419	0.000	.086	63.740	.398	9.801	.215	8.647
.356	.837	.086	1.704	.398	0.000	.108	43.467	.377	4.329	.258	3.825
.000	0.000	.097	.617	.377	0.000	.129	31.220	.356	5.717	.301	1.746
.000	0.000	0.000	0.000	.356	0.000	.151	17.171	.335	0.000	.344	.665
.000	0.000	0.000	0.000	.335	0.000	.172	10.407	.314	0.000	.387	.083
.000	0.000	0.000	0.000	.314	0.000	.194	7.024	.293	0.000	.430	0.000
.000	0.000	0.000	0.000	.293	0.000	.215	2.341	.272	0.000	.473	0.000
.000	0.000	0.000	0.000	.272	0.000	.237	.260	.251	0.000	.516	0.000
.000	0.000	0.000	0.000	.251	0.000	.258	.180	.230	0.000	.559	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.417863		1.944070		.454763		1.970394		.452425		1.942135	
VARIANCE A		.002988		.010274		.017308		.025847		.041006	
VARIANCE B		.002469		.009301		.015137		.019226		.040639	
AVERAGE C		94.1383		39.3279		37.9109		30.0936		26.2633	

MEDIUM NOZZLE DIAMETER = 1.094CM											
JET STRENGTH = 4.57				FROUDE NO. = INF.				STATION 6.00			
STATION 6.00				STATION 8.00				STATION 10.00			
VERTICAL	C	HORIZ	Y/D = .57	VERTICAL	C	HORIZ	Y/D = .57	VERTICAL	C	HORIZ	Y/D = .57
Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW	
.990	3.063	.602	0.000	.990	4.210	.688	0.000	.990	4.162	.860	0.000
.938	5.268	.516	.389	.938	5.613	.602	.493	.938	6.774	.774	.122
.885	12.455	.430	1.090	.885	5.118	.516	1.684	.885	10.891	.688	1.754
.832	22.012	.344	1.581	.832	11.350	.430	1.931	.832	8.545	.602	1.673
.779	34.222	.258	5.494	.779	7.017	.344	4.643	.779	11.378	.516	1.265
.726	25.544	.172	24.211	.726	13.414	.258	6.861	.726	9.873	.430	2.081
.673	20.848	.086	36.589	.673	13.373	.172	12.161	.673	14.300	.344	2.693
.620	30.832	0.000	34.798	.620	17.005	.086	20.495	.620	10.625	.258	4.324
.567	30.057	.086	34.900	.567	17.500	0.000	21.200	.567	8.589	.172	5.467
.514	36.958	.172	22.732	.514	17.170	.086	17.174	.514	6.862	.086	13.014
.461	39.000	.258	16.635	.461	9.534	.172	19.064	.461	6.287	0.000	14.360
.408	24.503	.344	10.942	.408	15.354	.258	11.874	.408	8.102	.086	14.156
.356	32.588	.430	3.347	.356	12.795	.344	7.124	.356	6.198	.172	16.400
.303	20.991	.516	.655	.303	12.547	.430	4.602	.303	10.050	.258	9.261
.250	17.397	.602	.674	.250	9.741	.516	1.438	.250	8.810	.344	9.741
.197	11.516	0.000	0.000	.197	8.415	.602	.370	.197	6.995	.430	5.875
.144	10.149	0.000	0.000	.144	5.820	.688	.205	.144	5.933	.516	4.732
.091	5.562	0.000	0.000	.091	3.756	0.000	0.000	.091	6.995	.602	2.529
.038	3.349	0.000	0.000	.038	0.000	0.000	0.000	.038	0.000	.688	.325
.000	0.000	0.000	0.000	.000	0.000	0.000	0.000	.000	0.000	.774	.490
.000	0.000	0.000	0.000	.000	0.000	0.000	0.000	.000	0.000	.860	0.000
.000	0.000	0.000	0.000	.000	0.000	0.000	0.000	.000	0.000	.946	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.440715		1.941276		.441734		2.000433		.414213		2.044428	
VARIANCE A		.114144		.094414		.175591		.094443		.287627	
VARIANCE B		.123721		.094414		.175591		.094443		.287627	
AVERAGE C		11.4144		10.9414		17.5591		10.9443		28.7627	

TABLE 9 - continued

MEDIUM NOZZLE DIAMETER = 1.094CM											
JET STRENGTH = 7.60				FROUDE NO. = INF.				STATION 3.00			
STATION 1.00				STATION 2.00				STATION 3.00			
VERTICAL	HOVIZ	Y/D = .57		VERTICAL	HOVIZ	Y/D = .57		VERTICAL	HOVIZ	Y/D = .57	
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.800	0.000	.129	0.000	.885	0.000	.258	0.000	.940	4.294	.344	0.000
.779	3.005	.116	.950	.832	3.156	.237	1.154	.938	5.572	.301	2.538
.758	22.819	.108	2.216	.779	6.293	.215	2.832	.885	23.910	.258	5.171
.737	5.043	.097	6.111	.726	14.110	.194	4.510	.842	10.770	.215	24.442
.715	33.719	.086	8.125	.673	78.556	.172	7.866	.779	45.977	.172	17.246
.694	58.997	.075	15.037	.620	164.715	.151	14.368	.726	45.801	.129	22.042
.673	83.789	.065	44.426	.567	162.146	.129	39.114	.673	75.765	.086	27.263
.652	181.924	.054	79.197	.514	184.800	.108	26.953	.620	91.515	.043	65.994
.631	227.834	.043	150.584	.461	163.142	.086	57.786	.567	46.735	0.000	102.000
.610	258.141	.032	221.181	.408	114.425	.065	73.885	.514	102.000	-.043	69.379
.588	337.192	.022	258.431	.355	52.440	.043	101.677	.461	84.145	-.086	54.525
.567	348.500	.011	287.292	.303	11.694	.022	114.996	.408	58.765	-.129	42.442
.546	320.333	0.000	324.500	.250	8.390	0.000	131.514	.355	37.115	-.172	24.818
.525	303.015	-.011	243.782	.197	4.457	-.022	153.800	.303	23.822	-.215	12.033
.504	248.787	-.022	273.094	.144	1.731	-.043	112.531	.250	17.263	-.258	4.324
.483	295.731	-.032	233.105	.091	.629	-.065	64.742	.197	11.406	-.301	1.692
.461	162.942	-.043	149.740	0.000	0.000	-.086	51.704	.144	6.230	-.344	0.000
.440	72.226	-.054	79.034	0.000	0.000	-.108	33.350	.091	2.435	0.000	0.000
.419	31.733	-.065	58.197	0.000	0.000	-.129	23.440	0.000	0.000	0.000	0.000
.398	15.230	-.075	21.000	0.000	0.000	-.151	12.900	0.000	0.000	0.000	0.000
.377	4.380	-.086	12.505	0.000	0.000	-.172	18.668	0.000	0.000	0.000	0.000
.356	2.598	-.097	7.017	0.000	0.000	-.194	4.405	0.000	0.000	0.000	0.000
.334	.357	-.108	4.327	0.000	0.000	-.215	.944	0.000	0.000	0.000	0.000
0.000	0.000	-.116	2.638	0.000	0.000	-.237	.052	0.000	0.000	0.000	0.000
0.000	0.000	-.129	.844	0.000	0.000	-.258	.105	0.000	0.000	0.000	0.000
MEAN	MEAN			MEAN	MEAN			MEAN	MEAN		
.416942	1.939834			.451301	1.937781			.417801	1.950829		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.004283	.004205			.009713	.020054			.023940	.046190		
VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B		
.004864	.004120			.010953	.013082			.020911	.024076		
AVERAGE C	AVERAGE C			AVERAGE C	AVERAGE C			AVERAGE C	AVERAGE C		
*2.4475	*1.4963			60.6178	42.3320			41.2680	28.0037		

MEDIUM NOZZLE DIAMETER = 1.094CM											
JET STRENGTH = 7.60				FROUDE NO. = INF.				STATION 10.00			
STATION 6.00				STATION 8.00				STATION 10.00			
VERTICAL	HOVIZ	Y/D = .57		VERTICAL	HOVIZ	Y/D = .57		VERTICAL	HOVIZ	Y/D = .57	
Y/D	C	Z/HW	C	Y/D	C	Z/HW	C	Y/D	C	Z/HW	C
.990	3.819	.516	0.000	.990	4.489	.688	0.000	.990	8.043	.774	0.000
.938	7.884	.430	2.003	.938	6.941	.602	.861	.938	12.292	.688	.281
.885	6.200	.344	3.185	.885	11.384	.516	1.149	.885	10.683	.602	.522
.832	12.196	.258	10.273	.832	17.125	.430	5.169	.832	16.953	.516	.803
.779	30.920	.172	11.560	.779	20.533	.344	8.861	.779	13.447	.430	3.933
.726	13.427	.086	42.170	.726	10.400	.258	10.091	.726	10.683	.344	5.017
.673	36.628	0.000	45.200	.673	24.650	.172	23.214	.673	11.673	.258	9.954
.620	43.731	-.086	40.064	.620	22.445	.086	26.493	.620	10.147	.172	10.114
.567	43.239	-.172	24.147	.567	24.648	0.000	29.700	.567	16.045	.086	23.600
.514	34.657	-.258	20.135	.514	26.665	-.086	24.859	.514	15.385	0.000	20.630
.461	48.700	-.344	7.407	.461	19.702	-.172	19.321	.461	17.778	-.086	17.254
.408	38.229	-.430	1.541	.408	18.746	-.258	14.276	.408	20.500	-.172	19.305
.356	34.053	-.516	.976	.356	12.137	-.344	8.369	.356	13.735	-.258	13.446
.303	20.778	-.602	.514	.303	12.103	-.430	10.091	.303	10.648	-.344	7.064
.250	19.546	0.000	0.000	.250	9.477	-.516	3.651	.250	7.425	-.430	3.933
.197	32.357	0.000	0.000	.197	8.113	-.602	1.026	.197	4.702	-.516	5.057
.144	20.645	0.000	0.000	.144	5.502	-.688	.533	.144	4.331	-.602	2.689
.091	14.249	0.000	0.000	.091	4.281	-.774	0.000	.091	3.745	-.688	.682
0.000	0.000	0.000	0.000	0.000	0.000	-.861	0.000	0.000	3.382	-.774	.161
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN			MEAN	MEAN			MEAN	MEAN		
.481042	2.006647			.539001	1.971777			.465018	2.025256		
VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A			VARIANCE A	VARIANCE A		
.040148	.104471			.039486	.204718			.052806	.223651		
VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B			VARIANCE B	VARIANCE B		
.034671	.090459			.037002	.177457			.040230	.153441		
AVERAGE C	AVERAGE C			AVERAGE C	AVERAGE C			AVERAGE C	AVERAGE C		
25.1313	15.2123			15.0894	10.4538			11.1498	7.0026		

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TABLE 9 - continued

LARGE NOZZLE DIAMETER = 1.882CM											
JET STRENGTH = 1.12				FROUDE NO. = INF.				STATION 2.00			
STATION 1.00				STATION 3.00				STATION 4.00			
VERTICAL	C	HORIZ	Y/D = .57	VERTICAL	C	HORIZ	Y/D = .57	VERTICAL	C	HORIZ	Y/D = .57
Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW	
.938	0.000	.140	0.000	.938	0.000	.258	0.000	.938	5.366	.430	0.000
.900	1.286	.129	3.940	.832	4.147	.231	1.126	.885	12.158	.387	.234
.774	1.978	.118	5.670	.774	11.255	.215	2.274	.832	14.630	.344	.458
.758	10.477	.108	4.076	.726	21.241	.194	2.905	.779	21.161	.301	2.508
.737	18.442	.097	17.004	.673	38.493	.172	4.842	.726	25.201	.258	3.662
.715	35.501	.086	34.240	.620	63.804	.151	8.468	.673	28.275	.215	5.494
.694	48.554	.075	83.315	.567	76.000	.129	24.800	.620	30.647	.172	7.763
.673	52.806	.065	45.453	.514	53.777	.108	20.168	.567	36.434	.129	17.238
.652	63.387	.054	92.252	.461	44.896	.086	17.053	.514	28.717	.086	27.548
.631	74.858	.043	99.075	.408	64.991	.065	41.305	.461	46.000	.043	42.656
.610	88.999	.032	103.303	.356	31.922	.043	64.000	.408	35.309	0.000	46.000
.589	108.974	.022	123.195	.303	22.100	.022	34.189	.356	21.925	-.043	39.810
.567	160.000	.011	160.000	.250	11.454	0.000	62.105	.303	27.652	-.086	31.340
.546	102.151	0.000	151.640	.197	4.788	-.022	54.021	.250	11.314	-.129	21.756
.525	135.575	-.011	154.330	.144	1.473	-.043	41.432	.197	19.976	-.172	16.581
.504	110.885	-.022	93.465	.091	.450	-.065	35.116	.144	16.780	-.215	8.161
.483	110.161	-.032	66.285	0.000	0.000	-.086	30.863	.091	11.695	-.258	7.006
.461	96.712	-.043	50.066	0.000	0.000	-.108	26.463	.038	9.124	-.301	3.006
.440	57.157	-.054	62.847	0.000	0.000	-.129	24.737	0.000	0.000	-.344	1.612
.419	50.729	-.065	45.550	0.000	0.000	-.151	11.453	0.000	0.000	-.387	.557
.398	24.920	-.075	39.111	0.000	0.000	-.172	7.705	0.000	0.000	-.430	.060
.377	16.119	-.086	25.658	0.000	0.000	-.194	14.611	0.000	0.000	0.000	0.000
.356	12.855	-.097	17.682	0.000	0.000	-.215	5.606	0.000	0.000	0.000	0.000
.334	3.456	-.108	11.339	0.000	0.000	-.237	.884	0.000	0.000	0.000	0.000
.313	1.879	-.118	4.517	0.000	0.000	-.258	.758	0.000	0.000	0.000	0.000
0.000	0.000	-.129	1.249	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.140	.192	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	.423849	MEAN	1.925251	MEAN	.455664	MEAN	1.947973	MEAN	.478393	MEAN	1.967848
VARIANCE A	.006874	VARIANCE A	.008148	VARIANCE A	.010469	VARIANCE A	.029287	VARIANCE A	.042750	VARIANCE A	.054464
VARIANCE B	.004832	VARIANCE B	.006090	VARIANCE B	.014029	VARIANCE B	.018353	VARIANCE B	.029327	VARIANCE B	.041973
AVERAGE C	55.7963	AVERAGE C	55.6432	AVERAGE C	28.2186	AVERAGE C	20.8792	AVERAGE C	22.3424	AVERAGE C	13.5002

LARGE NOZZLE DIAMETER = 1.882CM											
JET STRENGTH = 1.12				FROUDE NO. = INF.				STATION 11.00			
STATION 7.00				STATION 9.00				STATION 11.00			
VERTICAL	C	HORIZ	Y/D = .57	VERTICAL	C	HORIZ	Y/D = .57	VERTICAL	C	HORIZ	Y/D = .57
Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW	
.938	7.528	.688	0.000	.938	6.276	.774	0.000	.938	5.104	.860	0.000
.885	14.424	.602	.426	.885	5.772	.688	.115	.885	9.284	.774	.370
.832	11.252	.516	.716	.832	13.486	.602	.865	.832	6.689	.688	.424
.779	14.631	.430	5.576	.779	12.767	.516	2.658	.779	7.321	.602	.289
.726	11.391	.344	3.030	.726	13.047	.430	2.688	.726	7.707	.516	1.441
.673	13.999	.258	2.894	.673	9.227	.344	4.978	.673	8.332	.430	4.322
.620	18.000	.172	11.539	.620	10.414	.258	8.310	.620	11.000	.344	6.994
.567	13.653	.086	9.447	.567	14.000	.172	4.240	.567	9.102	.258	10.647
.514	13.476	0.000	20.000	.514	9.153	.086	13.916	.514	9.030	.172	10.569
.461	9.662	-.086	19.593	.461	10.330	0.000	13.640	.461	6.740	.086	7.459
.408	10.235	-.172	13.340	.408	11.983	-.086	12.154	.408	7.452	0.000	11.000
.356	10.828	-.258	7.202	.356	11.516	-.172	14.000	.356	7.205	-.086	10.852
.303	5.473	-.344	8.209	.303	11.534	-.258	10.155	.303	6.616	-.172	8.854
.250	7.251	-.430	3.340	.250	9.424	-.344	5.254	.250	5.591	-.258	5.695
.197	10.521	-.516	1.375	.197	5.753	-.430	2.711	.197	5.191	-.344	4.874
.144	9.049	-.602	.203	.144	4.487	-.516	1.835	.144	4.718	-.430	3.016
.091	5.769	-.688	.165	.091	4.857	-.602	.490	.091	5.118	-.516	2.195
.038	5.829	0.000	0.000	.038	4.623	-.688	0.000	.038	5.444	-.602	1.198
0.000	0.000	0.000	0.000	0.000	0.000	-.774	.276	0.000	0.000	-.688	.815
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.774	.343
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.860	.209
MEAN	.474450	MEAN	1.999554	MEAN	.444774	MEAN	1.951100	MEAN	.457020	MEAN	1.911486
VARIANCE A	.056870	VARIANCE A	.017782	VARIANCE A	.052423	VARIANCE A	.076165	VARIANCE A	.060124	VARIANCE A	.0296027
VARIANCE B	.042597	VARIANCE B	.012571	VARIANCE B	.054400	VARIANCE B	.040228	VARIANCE B	.049804	VARIANCE B	.030613
AVERAGE C	10.7179	AVERAGE C	6.2494	AVERAGE C	9.3972	AVERAGE C	5.4388	AVERAGE C	7.1689	AVERAGE C	4.3629

TABLE 9 - continued

LARGE NOZZLE DIAMETER = 1.882CM									
JET STRENGTH = 1.92					FROUDE NO. = INF.				
STATION 1.00					STATION 3.00				
VERTICAL	HORIZ	Y/D = .50	VERTICAL	HORIZ	VERTICAL	HORIZ	Y/D = .50	VERTICAL	HORIZ
Y/D	C	Z/HW	Y/D	C	Y/D	C	Z/HW	Y/D	C
.832	0.000	.172	0.000	.885	14.888	.387	0.000	.938	4.195
.811	14.022	.161	5.052	.832	12.060	.344	1.174	.885	9.460
.789	16.425	.151	21.398	.779	37.816	.301	2.581	.832	11.763
.768	50.878	.140	18.168	.726	27.692	.258	3.065	.779	17.769
.747	92.463	.129	9.689	.673	42.710	.215	3.548	.726	18.427
.726	149.410	.118	24.224	.620	51.100	.172	24.516	.673	12.000
.705	208.170	.108	17.764	.567	47.797	.129	37.752	.620	25.830
.684	231.556	.097	14.944	.514	60.000	.086	24.516	.567	15.383
.662	260.000	.086	24.627	.461	26.799	.043	41.124	.514	10.437
.641	200.704	.075	62.174	.408	40.496	0.000	73.548	.461	15.465
.620	136.610	.065	111.025	.356	22.481	-.043	60.000	.408	21.306
.599	99.353	.054	65.000	.303	27.395	-.086	59.677	.356	21.635
.578	64.307	.043	260.000	.250	11.315	-.129	60.000	.303	14.972
.557	54.083	.032	198.634	.197	25.757	-.172	40.161	.250	7.897
.535	32.049	.022	180.062	.144	12.953	-.215	17.419	.197	6.828
.514	17.227	.011	144.615	.091	11.762	-.258	14.677	.144	4.684
.493	17.227	0.000	225.240	.038	2.429	-.301	8.871	.091	1.064
.472	9.615	-.011	154.224	0.000	0.000	-.344	5.000	0.000	0.000
.451	6.810	-.022	163.504	0.000	0.000	-.387	3.065	0.000	0.000
.430	1.602	-.032	132.019	0.000	0.000	-.430	.968	0.000	0.000
.408	0.000	-.043	158.261	0.000	0.000	-.473	0.000	0.000	0.000
0.000	0.000	-.054	64.783	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.065	54.099	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.075	37.450	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.086	41.584	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.097	79.130	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.108	26.646	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.118	30.683	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.129	11.304	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.140	3.634	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.151	.404	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.161	1.211	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	-.172	1.211	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.319279	1.931188	.453472	2.017916	.422095	1.987765	.406845	1.995864	.406845	1.995864
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.003669	.011057	.035811	.060937	.033155	.128364	.037361	.152103	.037361	.152103
VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B
.002621	.005961	.024332	.043564	.025563	.107838	.041799	.130772	.041799	.130772
AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C
79.4365	73.2091	28.1214	23.9171	15.2427	14.5007	19.5924	10.2400	19.5924	10.2400

LARGE NOZZLE DIAMETER = 1.882CM									
JET STRENGTH = 1.92					FROUDE NO. = INF.				
STATION 9.00					STATION 11.00				
VERTICAL	HORIZ	Y/D = .50	VERTICAL	HORIZ	VERTICAL	HORIZ	Y/D = .50	VERTICAL	HORIZ
Y/D	C	Z/HW	Y/D	C	Y/D	C	Z/HW	Y/D	C
.938	14.579	.774	0.000	.938	7.768	.860	0.000	0.000	0.000
.885	19.292	.688	.982	.885	9.363	.774	.708	0.000	0.000
.832	21.555	.602	2.046	.832	8.746	.688	2.265	0.000	0.000
.779	17.910	.516	3.110	.779	12.244	.602	2.926	0.000	0.000
.726	17.658	.430	3.438	.726	9.363	.516	6.324	0.000	0.000
.673	16.779	.344	12.851	.673	11.318	.430	9.487	0.000	0.000
.620	17.910	.258	23.600	.620	10.238	.344	14.395	0.000	0.000
.567	17.784	.172	15.874	.567	10.458	.258	13.593	0.000	0.000
.514	15.773	.086	14.235	.514	10.752	.172	15.575	0.000	0.000
.461	19.167	0.000	15.060	.461	12.605	.086	14.112	0.000	0.000
.408	16.779	-.046	17.434	.408	11.884	0.000	15.009	0.000	0.000
.356	22.874	-.172	20.708	.356	13.494	-.046	14.348	0.000	0.000
.303	23.000	-.258	14.488	.303	14.765	-.172	16.000	0.000	0.000
.250	21.429	-.344	10.149	.250	14.117	-.258	11.948	0.000	0.000
.197	19.669	-.430	8.021	.197	15.331	-.344	9.628	0.000	0.000
.144	16.464	-.516	7.203	.144	16.000	-.430	10.997	0.000	0.000
.091	11.311	-.602	.737	.091	14.405	-.516	5.522	0.000	0.000
0.000	0.000	-.688	.573	.038	11.730	-.602	2.643	0.000	0.000
0.000	0.000	-.774	0.000	0.000	0.000	-.688	1.699	0.000	0.000
0.000	0.000	-.860	0.000	0.000	0.000	-.774	1.699	0.000	0.000
0.000	0.000	-.946	0.000	0.000	0.000	-.860	.519	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	-.946	0.000	0.000	0.000
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.458858	1.947734	.526519	1.925244	.458858	1.925244	.458858	1.925244	.458858	1.925244
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.054945	.224945	.054945	.224945	.054945	.224945	.054945	.224945	.054945	.224945
VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B	VARIANCE B
.044362	.224945	.044362	.224945	.044362	.224945	.044362	.224945	.044362	.224945
AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C
18.2314	8.3293	12.0157	7.7618	7.7618	7.7618	7.7618	7.7618	7.7618	7.7618

TABLE 9 - continued

LARGE NOZZLE DIAMETER x 1.00CM															
JET STRENGTH = 3.26								FROUD NO. = 100							
STATION 1.00				STATION 3.00				STATION 5.00				STATION 7.00			
VERTICAL	C	HORIZ	Y/D = .55	VERTICAL	C	HORIZ	Y/D = .55	VERTICAL	C	HORIZ	Y/D = .55	VERTICAL	C	HORIZ	Y/D = .55
Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW		Y/D		Z/HW	
.849	0.000	.129	0.000	.849	0.000	.134	0.000	.849	28.119	.430	0.000	.849	18.915	.802	0.000
.878	.000	.118	0.000	.878	11.995	.101	5.016	.878	19.206	.381	4.436	.878	24.089	.516	.476
.806	.000	.108	0.000	.806	4.116	.208	4.013	.806	39.135	.344	3.168	.806	60.000	.430	.951
.785	4.800	.097	2.100	.785	8.109	.215	11.034	.785	46.597	.301	5.555	.785	44.104	.344	13.306
.764	1.200	.086	1.100	.764	15.378	.172	15.061	.764	40.143	.258	11.881	.764	31.579	.258	17.598
.743	9.600	.075	6.801	.743	8.109	.169	6.201	.743	59.021	.172	59.021	.743	42.863	.172	40.927
.722	8.600	.065	21.116	.722	15.378	.086	10.145	.722	62.655	.172	46.099	.722	51.875	.086	40.308
.701	42.705	.054	20.880	.701	10.000	.084	10.000	.701	64.072	.129	44.861	.701	41.077	0.000	52.000
.679	54.791	.043	17.118	.679	17.118	0.000	15.000	.679	72.814	.086	39.129	.679	40.185	-.086	39.872
.658	211.100	.032	4.013	.658	10.000	-.043	10.133	.658	48.000	.043	70.812	.658	50.583	-.172	42.488
.637	222.180	.022	4.556	.637	12.913	-.086	11.134	.637	53.367	0.000	80.000	.637	53.092	-.258	21.878
.616	306.144	.011	5.000	.616	8.600	-.129	5.368	.616	76.980	-.043	61.366	.616	41.159	-.344	19.817
.595	343.052	0.000	5.600	.595	10.000	-.172	3.122	.595	45.338	-.086	49.267	.595	37.911	-.430	9.988
.574	406.734	-.011	4.213	.574	8.600	-.215	14.060	.574	62.497	-.129	19.444	.574	31.742	-.516	3.726
.552	560.000	-.022	3.452	.552	4.013	-.258	5.517	.552	25.137	-.172	36.752	.552	26.546	-.602	.159
.531	519.712	-.032	2.113	.531	21.116	-.301	4.013	.531	40.912	-.215	23.446	.531	20.214	0.000	0.000
.510	491.928	-.043	1.801	.510	11.121	-.344	.502	.510	38.726	-.258	4.436	.510	14.483	0.000	0.000
.489	433.446	-.054	7.666	.489	2.471	0.000	0.000	.489	31.013	-.301	11.881	0.000	0.000	0.000	0.000
.468	284.660	-.065	5.767	.468	0.000	0.000	0.000	.468	0.000	-.344	4.119	0.000	0.000	0.000	0.000
.447	251.842	-.075	15.294	.447	0.000	0.000	0.000	.447	0.000	-.387	1.267	0.000	0.000	0.000	0.000
.425	147.453	-.086	11.269	.425	0.000	0.000	0.000	.425	0.000	-.430	.317	0.000	0.000	0.000	0.000
.404	104.942	-.097	4.000	.404	0.000	0.000	0.000	.404	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.383	65.266	-.108	4.925	.383	0.000	0.000	0.000	.383	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.362	60.473	-.118	.805	.362	0.000	0.000	0.000	.362	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.341	50.763	-.129	3.220	.341	0.000	0.000	0.000	.341	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.320	39.453	0.000	0.000	.320	0.000	0.000	0.000	.320	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.299	48.745	0.000	0.000	.299	0.000	0.000	0.000	.299	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.277	30.614	0.000	0.000	.277	0.000	0.000	0.000	.277	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.256	9.864	0.000	0.000	.256	0.000	0.000	0.000	.256	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.235	4.835	0.000	0.000	.235	0.000	0.000	0.000	.235	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.214	5.840	0.000	0.000	.214	0.000	0.000	0.000	.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.193	2.417	0.000	0.000	.193	0.000	0.000	0.000	.193	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN		MEAN	
.443555		1.916265		.44RH22		1.930942		.446H17		1.902911		.427740		1.988618	
VARIANCE A		.004690		.026713		.040570		.044940		.075982		.047186		.155022	
VARIANCE H		.004715		.022292		.034335		.041821		.057706		.036977		.156658	
AVERAGE C		.11.9059		74.9199		52.4816		51.7662		27.5362		38.5561		20.4615	

LARGE NOZZLE DIAMETER = 1.892CM											
JET STRENGTH = 3.26						FROUDE NO. = INF.					
STATION 0.00						STATION 11.00					
VERTICAL	HORIZ	Y/D = .55	VERTICAL	HORIZ	Y/D = .55	VERTICAL	HORIZ	Y/D = .55	VERTICAL	HORIZ	Y/D = .55
Y/D	Z/HW	C	Y/D	Z/HW	C	Y/D	Z/HW	C	Y/D	Z/HW	C
.944	21.427	.774	0.000	.944	17.467	.703	0.000	.944	20.964	.989	0.000
.891	21.312	.688	.104	.891	24.544	.617	1.041	.891	31.406	.903	.412
.834	29.792	.602	5.201	.838	24.463	.731	5.189	.838	24.900	.817	1.400
.785	44.000	.516	.624	.785	40.863	.645	7.306	.785	35.502	.731	3.864
.732	35.979	.430	.621	.732	32.706	.559	9.542	.732	36.064	.645	19.182
.679	31.682	.344	13.002	.679	46.000	.471	12.771	.679	42.771	.559	33.012
.626	28.940	.258	14.563	.626	24.000	.387	23.144	.626	32.590	.471	23.051
.574	27.156	.172	24.340	.574	37.620	.301	27.370	.574	35.904	.387	22.722
.521	27.411	.086	44.000	.521	31.529	.215	26.031	.521	29.558	.301	22.145
.468	37.411	0.000	43.192	.468	34.745	.129	38.000	.468	33.815	.215	34.000
.415	26.498	-.086	33.464	.415	40.744	-.043	30.048	.415	40.000	.129	30.956
.362	20.479	-.172	30.051	.362	34.400	-.041	26.531	.362	35.063	.043	20.000
.309	25.604	-.258	25.277	.309	31.048	-.129	26.366	.309	38.233	-.043	26.151
.256	22.765	-.344	24.566	.256	29.463	-.215	24.331	.256	34.649	-.129	24.944
.203	13.246	-.430	24.406	.203	21.461	-.301	22.657	.203	30.442	-.043	18.852
.150	23.468	-.516	7.541	.150	25.034	-.387	10.124	.150	27.631	-.301	14.242
.097	30.307	-.602	4.185	.097	22.657	-.471	11.551	.097	24.257	-.387	4.610
0.000	0.000	-.688	2.060	.044	0.000	-.554	3.345	.044	28.594	-.471	11.855
0.000	0.000	-.774	.104	0.000	0.000	-.645	.921	0.000	0.000	-.559	7.442
0.000	0.000	0.000	0.000	0.000	0.000	-.731	.004	0.000	0.000	-.645	3.243
0.000	0.000	0.000	0.000	0.000	0.000	-.817	.670	0.000	0.000	-.731	3.044
0.000	0.000	0.000	0.000	0.000	0.000	-.903	0.000	0.000	0.000	-.817	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.989	1.070
MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN
.444664	2.014444	.444664	.444664	.444664	1.411275	.444664	.444664	.444664	.444664	.444664	.444664
VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A	VARIANCE A
.056460	.214444	.056460	.056460	.056460	.044432	.056460	.056460	.056460	.056460	.056460	.056460
VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H	VARIANCE H
.045404	.145444	.045404	.045404	.045404	.211122	.045404	.045404	.045404	.045404	.045404	.045404
AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C	AVERAGE C
.24.3212	.15.6170	.24.3212	.24.3212	.24.3212	.11.8372	.24.3212	.24.3212	.24.3212	.24.3212	.24.3212	.24.3212